ANNEXURE IV

A-MEDICAL EQUPMENTS

1. STETHOSCOPE (PEDIATRIC)

MEDICAL DEVICE SPECIFICATION **(Including Information on the following where relevant/appropriate, but not limited to)**


NAME AND CODING		
GMDN name		Stethoscopes
GMDN definition		A mechanical listening device designed for listening to sounds from the heart, lungs, and/or gastrointestinal tract. It typically comprises a membrane at the listening head connected by a split "Y" tube to the headgear with ear olives that are placed into the user's ears. Mechanical stethoscopes are typically found in two variants 1) a general-purpose stethoscope used for clinical/ward activities; or 2) a reinforced stethoscope used by cardiologists.
1	**GENERAL USE**	
1.1	**Clinical purpose**	listening to sounds from the heart, lungs, and/or gastrointestinal tract
1.2	**Used by clinical department/ward**	All
2	**TECHNICAL** TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	Stethoscope of pediatric size, chromium plated metal binaural, V rubber tube in one piece. Rotating piper fitting for both flip functions.
2.2	**Settings**	NA
2.3	**User's interface**	Manual
2.4	**Software and/or standard of communication(where ever required)**	NA
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	Diaphragm approx: 20 mm

3.2	**Weight (lbs, kg)**	NA
3.3	**Configuration**	NA
3.4	**Noise (in dBA)**	NA
3.5	**heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	NA
4.2	**Battery operated**	NA
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	NA
4.6	**Other energy supplies**	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories& Spares; Consumables / reagents (open, closed system)'**	1 x spare set of earpiece, 1 x spare diaphragm,
	BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS	
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	NA
7	STANDARDS AND SAFETY	
7.1	**Certifications**	by ISO 9001 certified manufacturer
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	NA
8.2	**Requirements for sign-off**	NA

8.3	**Training of staff (medical, paramedical, technicians)**	NA
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	1 year
9.2	**Maintenance tasks**	NA
9.3	**Service contract clauses, including prices**	NA
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	NA
10.3	**Recommendations for maintenance**	NA
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	NA
11.2	**Recommendations or warnings**	NA

2. SPHYGMOMANOMETER WITH PEDIATRIC CUFF WITH 3 DIFFERENT SIZES (INFANT, CHILD AND ADULT) REUSABLE

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)	
	

NAME AND CODING	
GMDN name	Sphygmomanometers
GMDN definition	A device designed to measure blood pressure consisting of an inflatable cuff that fits around a limb (arm or thigh), an inflation bulb for controlling the air pressure within the cuff, an aneroid manometer, and tubing. The aneroid manometer consists of a metal bellows, which expands as the pressure in the cuff increases, and a mechanical amplifier that transmits this expansion through a lever to an indicator needle, which rotates around a circular, calibrated scale. The manometer may be mounted to a wall, placed on a table, or hand held (portable); blood pressure measurement is taken in conjunction with a stethoscope.

GENERAL USE		
1.1	**Clinical purpose**	To measure noninvasive blood pressure
1.2	**Used by clinical department/ward**	All

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	Scale 0-300 mm hg. Air release at closed lap with maximum 4mmHg/Minute. Manual setting of deflation possible up to 2/3mm Hg/sec. From 260mmHg. To 15mm Hg in a maximum deflation time of 10 seconds. Gauge's background in white color. Graduated scale for ever/ 2mmhg, every 10 units and every 20 units. Nylon straps cuff with pouch, latex bulb with completely chromium plated valve with regulation of vent-hole air by screw valve.

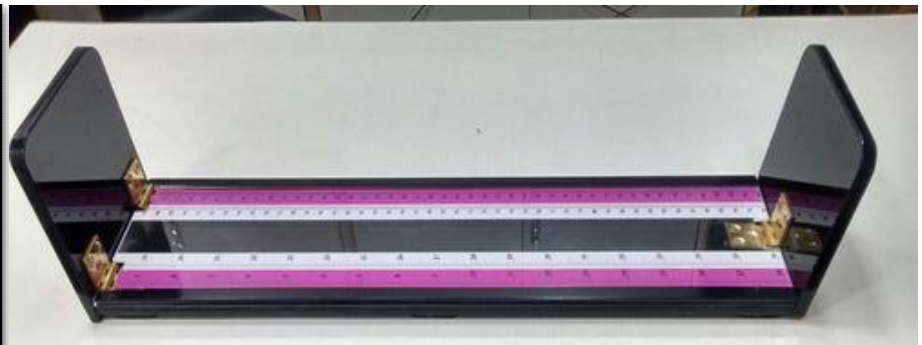
2.2	**Settings**	The cuff is inflated just to fit in the limb for which an inflation bulb is used to control the air pressure within the cuff.
2.3	**User's interface**	Manual
2.4	**Software and/or standard of communication(where ever required)**	NA
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	The rubber tubes used should have an internal diameter of 3 ± 0.5mm and the external diameter should not be less than 8mm; The dial manometer with minimum diameter of 160 mm
3.2	**Weight (lbs, kg)**	NA
3.3	**Configuration**	NA
3.4	**Noise (in dBA), heat dissipation**	NA
3.5	**Mobility, portability**	Yes
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	NA
4.2	**Battery operated**	NA
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	NA
4.6	**Other energy supplies**	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	adult arm cuffs of size medium & large and pediatric size, inflation bulb, tubing
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	

6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	NA
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type); Local and/or international**	ISO 13485
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	1 years
9.2	**Maintenance tasks**	Maintenance manual detailing complete maintaining schedule
9.3	**Service contract clauses, including prices**	NA

10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	NA
	Other accompanying documents	NA
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	NA
11.2	**Recommendations or warnings**	Any recommendations for best use and supplementary warning for safety should be declared

3. INFANTOMETER WITH INTEGRATED HEAD PIECE AND SLIDING LEG POSITIONER 10-99CM:

a) Infantometer- for infants and small children.



Features:

Measuring range 10 - 99 cm / 4 - 36 in Graduation 5 mm / 1/4 in Dimensions (WxHxD) 300 x 140 x 1340 mm Weight 500 g.

For easy, precise length measurement of the babies and toddlers while lying down.

Measurement Options in both cm and inches.

Clinical Length v/s age and weight charts for easy reference.

Easy to clean, easy to store, foldable with fitting for storing on wall.

Light weight, portable and easy to carry.

Ergonomic Design to ensure safety of the baby.

Fixed head piece and the sliding foot positioned for easy use.

b) Baby Height Measuring mat:- for infants and small children.

A space saving, easy and accurate solution for baby length measuring , Measuring range - 8 to 75 cm , Dimension - 95 x 25 x 10 cm. Wall Hanging possible, Washable material Ultra-soft flexible measuring mat for infant height monitoring.

Features

A space saving, easy and accurate solution for baby length measuring
Measuring range - 8 to 75 cm
Dimension - 95 x 25 x 10 cm
Wall Hanging possible
Washable material
Flexible, foldable and easily position able

4. ELECTRONIC BABY WEIGHING SCALE

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)	
Weighing Scale	
NAME AND CODING	
GMDN name	NA (Instrument)
GMDN code(s)	NA
Definition	NA

GENERAL USE		
1		
1.1	**Clinical purpose**	to measure body mass of the neonate
1.2	**Used by clinical**	NICU/SNCU
	department/ward	
1.3	**Overview of functional requirements**	

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	1. Table top, light and portable, 2. Built in rechargeable battery, 3. Easy to clean baby tray (acrylic), 4. Zero weight adjustment facility, 5. Quick, clear digital read outs, 6. Measurement does not change with position of baby on the pan; 7. Provision to measure the height of the baby in its laying position. 8. Accuracy: 5g, resolution: 1g, limit: 10gm ~ 15kg
2.2	**Settings**	Auto setting to 0.00 once a the machine is switched on or when no external weight has been put on
2.3	**User's interface**	LCD display
2.4	**Software and/or standard of communication(where ever required)**	in built
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	Base: 300mm x 265mm x 85mm, Pan: 510mm x 300mm x 85mm
3.2	**Weight (lbs, kg)**	NA
3.3	**Configuration**	N.A.
3.4	**Noise (in dBA)**	N.A.
3.5	**heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	230 V AC,
4.2	**Battery operated**	6V, one hour backup
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	NA

4.6	**Other energy supplies**	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	NA
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90% in ideal circumstances –Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. – an ambient air velocity less than 0.3 m/s.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washed and disinfected using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..);Performance and safety standards (specific to the device type);Local and/or international**	The Scale should be as per BIS specifications. The scale should have ISI mark i.e. IS: 2489 Or CE/FDA certified. Should have model approval from Legal Metrology Dept., Govt. of India.
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	NA

8.2	**Requirements for sign-off**	NA
8.3	**Training of staff (medical, paramedical, technicians)**	NA

9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	one year
9.2	**Maintenance tasks**	calibration schedule to be provided
9.3	**Service contract clauses, including prices**	Any Contract (AMC/MC/ad-hoc) to be declared by the manufacturer
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	NA
10.2	**Other accompanying documents**	NA
10.3	**Recommendations for maintenance**	Cautionary Note: Do not press the weighing pan with your hand. It could damage the load cell system in the weighing machine
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Any Contract (AMC/MC/ad-hoc) to be declared by the manufacturer
11.2	**Recommendations or Warnings**	Any Contract (AMC/MC/ad-hoc) to be declared by the manufacturer

5. ELECTRONIC ADULT WEIGHING SCALE (PLATFORM TYPE):

1. Capacity: 160 kg

2. Accuracy: 100 g

3. Platter Size: 350 mm x 300 mm (Tolerance +/- 10%)

4. The scale should be made up of heavy duty. Cast iron structure Platform with powder coated Frames.

5. The Electronic Adult Weighing Scale should incorporate following features for user-friendly Convenience.

6. Display: LED / LCD: 5 digits with min. height 14 mm.

8. TARE facility with zero function.

9. HOLD function to lock the weight.

10. MEMORY function, to keep the last weight in memory.

11. The Scale should have inbuilt rechargeable battery backup for minimum of 8 hrs.

12. Should operate on mains 220-240Vac, 50 Hz single phase.

13. The Scale should be as per BIS specifications. The scale should have ISI mark.

6. HEIGHT MEASURING SCALE(STANDIOMETER)

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)	
Height measuring scale (Stadiometer)	
 	
NAME AND CODING	
GMDN name	Patient-height measure
GMDN definition	A device designed to measure the height of a patient. It can be, e.g., a wall-mounted graduated scale or a freestanding vertical graduated rod with an adjustable cross-piece that is placed on the top of the patient's head. It may provide analogue or digital readings.

GENERAL USE		
1		
1.1	**Clinical purpose**	To measure the height of an individual
1.2	**Used by clinical department/ward**	All

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	1. Stand should be made of metal 2. Measuring range should be 75cm to 200cm 3. Least Count should be 0.5 cm 4. Should be simple and manual in use.
2.2	**User's interface**	Manual
2.3	**Software and/or standard of communication(where ever required)**	*NA*
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	Measuring range should be 75cm to 200cm
3.2	**Weight (lbs, kg)**	NA
3.3	**Configuration**	NA
3.4	**Noise (in dBA)**	NA
3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Portable and fixed (as per requirement)
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	NA

4.2	**Battery operated**	NA
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	NA
4.6	**Other energy supplies**	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional)**	NA
5.2	**Spare parts (main ones)**	NA
5.3	**Consumables / reagents (open, closed system)**	NA
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	NA
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISI mark
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	NA

8.2	**Requirements for sign-off**	NA
8.3	**Training of staff (medical, paramedical, technicians)**	Na
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	Three years
9.2	**Maintenance tasks**	NA
9.3	**Service contract clauses, including prices**	NA
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	NA
10.2	**Other accompanying documents**	NA
10.3	**Recommendations for maintenance**	NA
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Contact details of manufacturer, supplier and local service agent to be provided
11.2	**Recommendations or warnings**	NA

7. MID UPPER ARM CIRCUMFERENCE TAPE

MUAC, Child 11.5 Red/PAC-50

Cut-off points

Red: 0 11.5 cm

Yellow: 11.5 cm-12.5 cm

Green: from 12.5 cm

8. Head circumference tape-Non stretchable TEFLON synthetic material

Ibis Infant Head Circumference Tape

Ibis H C Tape: Ultra soft NonStretchable washable Head circumference measuring Tape

Measuring Range : 5-50 cm / 2 –20 Inch

Graduations :1 mm

Quantity /Box - 3 Nos /Box

Box Dimension - 120 X 120 X 50 mm

B-HEARING EQUIPMENTS

1. SCREENER PAEDIATRIC AUDIOMETER

Screener Paediatric Audiometer :

Frequency: 500, 1000, 2000, 3000, 4000 Hz
Intensity: 0 to 80 dB (10 dB Steps)
Tone: Warble tone, Narrow band noise and Broad band noise
Free field & Single Earphone transducer (TDH39 Audiometric Headphone) with cord and cup
LCD bulbs for distraction of newborns
Battery operated (AA size).{12v & also can work from 110 or 220vac mains}.

Useful for: Behavioural Observation Audio metry Estimating ear specific threshold using single ear headphones in children.

2. PURE TONE AUDIOMETER WITH BONE CONDUCTOR: DIAGNOSTIC

Useful for: Pure tone Audiometry Speech Audiometry Free field testing **(125-8000 Hz)**

MEDICAL DEVICE SPECIFICATION
(Including Information on the following where relevant/appropriate, but not limited to)

NAME AND CODING		
GMDN name		Audiometric/hearing aid tester
GMDN definition		An electro acoustic device intended to be used for the evaluation of hearing loss (audiometer function), the evaluation of hearing aids while worn to assure optimal amplification (real-ear measurement), and/or for other hearing aid analysis (functions as the hearing aid analyzer to check its proper function when this is being fitted to the patient). It typically consists of a test box and a control unit that connect to a computer that runs application software to provide results and graphics (which may be stored in a database). The control unit may also be connected to other manufacturer's test boxes, or run as an audiometer or real-ear-measurement instrument without the test box.
GENERAL		
1	USE	
1.1	**Clinical purpose**	Evaluation of hearing loss
1.2	**Used by clinical department/ward**	ENT

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	1) Should be Simple and convenient to Operate 2) Portable Diagnostic Instrument : AC, BC, Speech and Free field Audiometer 3) Special tests such as short Increment Sensitivity Index (SISI), tone Decay test and Alternate Binaural Loudness Balance (ABLB)Test 4) Mixing signals and channels can be mixed independently 5) Speech tests from SD-memory card, CD or microphone 6) Direct printout of the results or store report as PDF on USB memory stick 7) Patient database for more than 1000 test results 8) Options include FF speakers, insert phones, PC interface, High Frequency – up to 10 KHz etc 9) Range of frequencies from 250 HZ to 8000 HZ ,-10 dB(minus 10 dB HL) to 100 dB 10) Increments of 5 dB 11) Frequency deselect ion: The following frequencies can be deselected in the setup: 250, 500, 750, 1500, 2000, 3000, 4000, 6000, 8000Hz. 12) Input : Tone 5 Hz or True sine wave frequency modulation •INPUT: Tone, Speech, Tape, Pulse Tone. 13) Output : Either to right and left speakers and also earphones •HEADPHONES: •BONE: BONE CONDUCTOR. 14) Tone decay test available 15) White noise masking 16) Both Air and bone conduction facility
		17) For Free field : should have 2 separate good quality Speakers 18) Should also have good quality Head Phone 19) Could be operated both on battery and AC with built in voltage regulator 20) Should have facilities for bone conduction Hearing Threshold Range: 0 to 90 (up to)dB in 5dB steps 21) Accuracy better than ± 2 dB 22) Harmonic Distortion - less than 3%
2.2	**User's interface**	headphone, speaker and printer

2.3	**Software and/or standard of communication(where ever required)**	Type: Intel Pentium P4 compatible or better; RAM: minimum 1GB; Hard disk: Minimal 5 GB free disk space Interface: USB 1.1 or 2 Display: SVGA-Color Display 800x600 or better Operating system: Windows XP SP 3 Professional Windows 7 32/64bit Professional or Ultimate
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	light weight
3.3	**Configuration**	Type: Intel Pentium P4 compatible or better; RAM: minimum 1GB; Hard disk: Minimal 5 GB free disk space Interface: USB 1.1 or 2 Display: SVGA-Color Display 800x600 or better Operating system: Windows XP SP 3 Professional Windows 7 32/64bit Professional or Ultimate
3.4	**Noise (in dBA)**	NA
3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	220-240Vac; 50/60 HZ
4.2	**Battery operated**	minimum 2 hours backup
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	as per device

5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	headphone, speaker and printer
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISO 13485 certified manufacturer IEC 60645:2012 general requirements for audiometers IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1: 2012 ISO 14971 : 2007 IEC 6060-1-2 ISO 8253(1) 1989 Audiometric Test Methods - Part 1: Basic Pure Tone Air and Bone Conduction Audiometry ISO 6189-1983 Acoustics-Pure Tone Air Conduction Threshold Audiometry for Hearing Conservation Purposes IEC 60651 (1979) and IEC 60804 (1985): Sound level meters ISO-1999 (1992): Estimation of Noise-Induced Hearing Loss US FDA or European CE certified product
8	TRAINING AND INSTALLATION	

8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform installation, safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of Calibration and inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	three years
9.2	**Maintenance tasks**	maintenance manual detailing complete maintaining schedule
9.3	**Service contract clauses, including prices**	Local clinical staff to affirm completion of installation
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language. List to be provided of equipment and procedures required for local calibration and routine maintenance
10.2	**Recommendations for maintenance**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Contact details of manufacturer, supplier and local service agent to be provided

11.2	**Recommendations or warnings**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.

3. PEDIATRIC AUROSCOPE(OTOSCOPE)

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Paediatric Auroscope (Otoscope)		
		
NAME AND CODING		
GMDN name		Pediatric Auroscope

GENERAL USE		
1		
1.1	**Clinical purpose**	An otoscope allows the doctor to look into the ear canal to see the ear drum. Redness or fluid in the eardrum can indicate an ear infection. Some otoscopes (called pneumatic otoscopes) can deliver a small puff of air to the eardrum to see if the eardrum will vibrate (which is normal). An ear examination with an otoscope can also detect a build-up of wax in the ear canal or a rupture or puncture of the eardrum.
1.2	**Used by clinical department/ward**	ENT

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	1) Should be a convenient pocket type Otoscope 2) Should be provided with a halogen light source. With 5 extra bulbs 3) Should have detachable Otoscope head 4) Should provide no reflections and obstructions 5) Should have in built rechargeable battery. Recharge should be possible with Direct mains supply 6)Magnification: a minimum of 2.5 X
2.2	**Settings**	NA
2.3	**User's interface**	Manual

2.4	**Software and/or standard of communication(where ever required)**	NA
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	NA(approx .3lbs{136G})
3.3	**Configuration**	NA
3.4	**Noise (in dBA)**	NA
3.5	**heat dissipation**	NA
3.6	**Mobility, portability**	Yes, Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	NA
4.2	**Battery operated**	NA
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	NA
4.6	**Other energy supplies**	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories& Spares; Consumables / reagents (open, closed system)'**	NA
6	**BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS** ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATIONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	NA

7	STANDARDS AND SAFETY	
7.1	**Certifications**	ISO 9001 and ISO 13485 certified manufacturer
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	NA
8.2	**Requirements for sign-off**	NA
8.3	**Training of staff (medical, paramedical, technicians)**	NA
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	1 year
9.2	**Maintenance tasks**	NA
9.3	**Service contract clauses, including prices**	NA
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	NA
10.3	**Recommendations for maintenance**	NA

4. PORTABLE TYMPANOMETRY / IMPEDANCE AUDIOMETER INSTRUMENT

MEDICAL DEVICE SPECIFICATION
(Including Information on the following where relevant/appropriate, but not limited to)

Portable Tympanometry Instrument with Printer

Tympanometry
Acoustic reflex threshold (Ipsi & contra)
Eustachian tube test: Reflex decay test.

The primary purpose of impedance Audiometry is to determine the status of the tympanic membrane and middle ear via Tympanometry.

The secondary purpose of this test is to evaluate acoustic reflex pathways, which include cranial nerves (CN) VII and VIII and the auditory brainstem. This test cannot be used to directly assess auditory sensitivity, although results are interpreted in conjunction with other threshold measures.

An acoustic reflex threshold is a middle ear measurement of stapedius muscle response to higher intensity and adequate duration sounds for individual frequencies. Consider the softest sound that elicits a reflex contraction of the stapedius muscle as the acoustic reflex threshold. When the stapedius muscle contracts in response to a loud sound, that contraction changes the middle ear immittance. This change in immittance can be detected as a deflection in the recording.

1	GENERAL USE	
1.1	**Clinical purpose**	Used to test the condition of the middle ear and mobility of the eardrum and the conduction bones
1.2	**Used by clinical department/ward**	ENT
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	1. Probe Tone: o 226 Hz Amplitude: 85 ±3 dB SPL o 1,000 Hz Amplitude: 83 ±3 dB SPL o Frequency Accuracy: ±2% o Total Harmonic Distortion: 3% Maximum

		o Signal Type: Continuous Sinusoid 2. Protocol: Screening, Diagnostic, 3. Pressure Measurement System o Direction of sweep: positive to negative pressure o Sweep Rate: 400 daPa/sec average during data acquisition period. Should have sweep rate 12.5, 50.0, 600/200 daPa/sec. o Range: +200 to -600 daPa o Display Resolution: 20 daPa o Accuracy: ±15% or ±10 daPa, whichever is greater o Compensation: Auto-zero every test cycle o Compliance range for 226 Hz: 1.0 to + 7.0 ml o Tympanometry With Multiple Probe Frequencies i.e., 226, 678, 800 & 1 KHz o Automatic And Manual Tympanometry With Selectable Pressure Ranges And Pump Speeds o Ipsi lateral and Contra lateral Reflex. o Reflex Decay o ETF for Intact and Perforated Ears. o Large LC Display, Inbuilt Printer & PC Interface 4. Stimulation for Reflex measurements should be 250,500, 1K, 2K, 4K, BBN, LBN, HBN, 5. Stimulus: 100 µs click, external input, non-acoustic. 6. Intensity range for Reflex: 35 to 120 (upto 110) dB HL with increment of 1 dB. 7. Facility of inbuilt LCD monitor & also facility to connect external monitor. 8. Internal printer & also have facility to connect external USB printer. 9. Internal memory for storing result up to 20 tests. 10. Should be supplied with data base management software.
2.2	**User's interface**	LCD monitor and printer

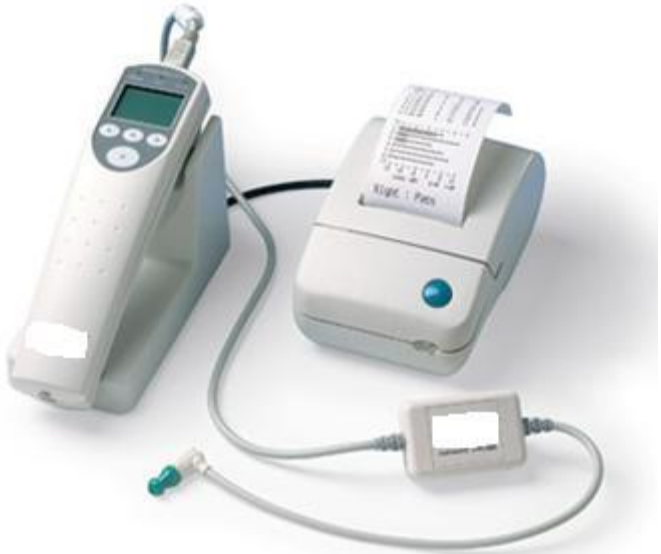
2.3	**Software and/or standard of communication(where ever required)**	Database management software to be supplied along with
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	light weight
3.3	**Configuration**	NA
3.4	**Noise (in dBA)**	NA
3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	220Vac; 50 HZ
4.2	**Battery operated**	minimum 2 hours backup
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	as per device

5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	Probe Assembly. Ear tips (standard and special size esp. for children), Printer thermal paper, Calibration test facilities.
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 degree C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 degree C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	

7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISO 13485 certified manufacturer IEC 60645-5/ ANSI S3.39, Type I IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1: 2012 ISO 14971 : 2007 IEC 60601-2-18 IEC 6060-1-2 US FDA or European CE certified product
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform installation, safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of Calibration and inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	three years
9.2	**Maintenance tasks**	maintenance manual detailing complete maintaining schedule
9.3	**Service contract clauses, including Prices**	Local clinical staff to affirm completion of Installation
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language. List to be provided of equipment and procedures required for local calibration and routine maintenance
10.2	**Recommendations for maintenance**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.
11	NOTES	
11.1	**Service Support Contact details**	Contact details of manufacturer, supplier and
	(Hierarchy Wise; including a toll free/landline number)	local service agent to be provided

11.2	**Recommendations or warnings**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.

5. OTO-ACOUSTIC EMISSIONS (OAE) INSTRUMENT

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)	
Oto-acoustic emissions (OAE) Instrument	
	
NAME AND CODING	
GMDN name	Oto-acoustic emission system, battery-powered

GMDN definition		An assembly of battery-powered devices designed to record and analyze the faint sounds hair cells in the inner ear emit [Oto-acoustic emission (OAE)] in response to a stimulus (e.g., click, tone burst, pure-tone signals) to test for a deficiency of function in the ear during diagnostic evaluation and/or neonatal screening. It typically consists of a portable programmable unit, an OAE probe, and ear tips. The stimulus signal is emitted via the probe inserted into the ear canal and the response is recorded via a microphone in the probe; OAEs are absent / reduced in patients with hearing loss. The system should not be combined with other audiological devices (e.g., Tympanometer, ABR device).
GENERAL USE		
1		
1.1	**Clinical purpose**	to record and analyze the faint sounds hair cells in the inner ear emit [Oto-acoustic emission (OAE)]
1.2	**Used by clinical department/ward**	ENT
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	a) Should be a handheld unit including probe cord and Cradle b) Should have a Printer including power supply and power cable, Printable text file display of the acquired data, including frequency, signal, noise, response and testing parameters c) Probe cord for extension at least 75 cm d) DPOAE protocol with Fast, accurate results—in as little as 10 seconds per ear e) Tip should be Easy-to-clean f) Results should have an Objective test—no patient response required g) Pass/Refer result provided—No interpretation required h) Should operate on rechargeable battery or AC power i) At least 10-test memory j) DPOAE Specifications: • Intensities from 40 to 70 dB SPL k) 4 independent stimulus channel l) 2 signal input channel
2.2	**User's interface**	Probe and printer

2.3	**Software and/or standard of communication(where ever required)**	*in built*
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	Less than 2 kgs.
3.3	**Configuration**	Type: Intel Pentium P4 compatible or better; RAM: minimum 1GB; Hard disk: Minimal 5 GB free disk space Interface: USB 1.1 or 2 Display: SVGA-Colour Display 800x600 or better Operating system: Windows XP SP 3 Professional Windows 7 32/64bit Professional or Ultimate
3.4	**Noise (in dBA)**	NA
3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Mobile
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	220-240Vac; 50/60 HZ
4.2	**Battery operated**	Rechargeable battery with 2 hours backup
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	as per device
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	Reusable ear-tips of various sizes starting from 3mm to 12 mm(each at least 10 for each size), probe cord, cradle, power cable and printer
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		

6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISO 13485 certified manufacturer IEC 60601-1- Medical electrical equipment-Part I: General requirement for safety IEC 60645-6- Oto-acoustic emission IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1: 2012 ISO 14971 : 2007 IEC 60601-2-18 IEC 6060-1-2 US FDA or European CE certified product
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform installation, safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of Calibration and inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	Three years
9.2	**Maintenance tasks**	Maintenance manual detailing complete maintaining schedule

9.3	**Service contract clauses, including prices**	Local clinical staff to affirm completion of installation
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language. List to be provided of equipment and procedures required for local calibration and routine maintenance
10.2	**Recommendations for maintenance**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Contact details of manufacturer, supplier and local service agent to be provided
11.2	**Recommendations or warnings**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.

6. AUTOMATIC ABR SCREENER WITHOUT DISPOSABLE ELECTRODES (RATHER WITH INTEGRATED ELECTRODES) STIMULATION LEVEL

35 DBHL; incl **software for Screening AABR, Additional Follow-up measuring modes: Time-Step-Stimulus and Standard ABR:**

BERAphone

Screening and follow-up with BERAphone incl. software for Screening AABR, Additional Follow- up measuring modes: Time-Step-Stimulus and Standard ABR, compatible with notebook or PC with USB port, including carrying bag

Upgrade

For Frequency Specific Screening Test feature with two bands of 135 — 1500 Hz 1500 — 8000 Hz

Consumables:
Stainless steel electrodes (1 pc.)
Stainless steel electrodes for pre-matures (1 pc.) Gel protection for electrodes (1 set of 3 pieces) Electrode gel, bottle 250 ml 801 086

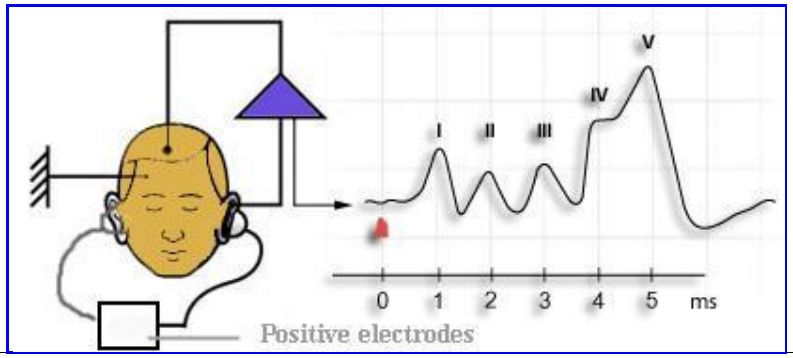
MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)	
	Automatic ABR Screener without disposable electrodes rather with integrated electrodes
NAME AND CODING	
GMDN name	Evoked-potential audiometer
GMDN definition	An electro acoustic instrument designed to evaluate the activity of the auditory pathway of the brain in response to an acoustic signal [auditory brainstem response (ABR)] it provides at the ear (e.g., clicks delivered through an earphone), without need of patient cooperation. The signal, detected via the device's scalp electrodes and possibly a reference electrode on the ear lobe, is measured using computer averaging and signal processing techniques. This device is typically used to assess the function of the auditory pathways and to differentiate coma due to metabolic factors from structural damage.

1	**GENERAL USE**	
1.1	**Clinical purpose**	to evaluate the activity of the auditory pathway of the brain in response to an acoustic signal [auditory brainstem response (ABR)]
1.2	**Used by clinical department/ward**	ENT
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	i) Lightweight Design ii) Inbuilt reusable electrodes make it easy to screen New Born and young Children iii) Fast and automatic ABR-screening, reliable results within seconds iv) Integrated electrodes and should have no disposable electrodes v) Automatic Impedance Check indicating impedance conditions vi) Stimulation level should start at 35 dBHL. vii) No Abrasive Skin Cleaning should be required viii) No Sticking Of Electrodes ix) Results should be stored in computer
2.2	**User's interface**	electrodes and computer
2.3	**Software and/or standard of communication(where ever required)**	*in built*
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	light weight
3.3	**Configuration**	Type: Intel Pentium P4 compatible or better; RAM: minimum 1GB; Hard disk: Minimal 5 GB free disk space Interface: USB 1.1 or 2 Display: SVGA-Colour Display 800x600 or better Operating system: Windows XP SP 3 Professional Windows 7 32/64bit Professional or Ultimate
3.4	**Noise (in dBA)**	NA

3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	220-240Vac; 50/60 HZ
4.2	**Battery operated**	NA
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	as per device
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	Electrodes
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety**	ISO 13485 certified manufacturer IEC 60601-1 -Medical electrical equipment-Part I: General requirement for safety

	standards (specific to the device type);Local and/or international	
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform installation, safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of Calibration and inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	Three years
9.2	**Maintenance tasks**	Maintenance manual detailing complete maintaining schedule
9.3	**Service contract clauses, including prices**	Local clinical staff to affirm completion of installation
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language. List to be provided of equipment and procedures required for local calibration and routine maintenance
10.2	**Recommendations for maintenance**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Contact details of manufacturer, supplier and local service agent to be Provided
11.2	**Recommendations or warnings**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.

7. BRAINSTEM EVOKED RESPONSE AUDIOMETER OR ABR WITH ASSR AND INSERT PHONE

S.N	BERA & ASSR 
1	Operational Requirements
1.1	The system should be able to perform the BERA, ASSR.
2	Technical Specification for BERA
2.1	It should be 2 channels
2.2	Should have ability to record under physiological and electromagnetic noises
2.3	Impedance measurement should be built in and displayed on screen.
2.4	Signal presentation : right, left and both
2.5	Should have pre-programmed auto tests
2.6	Stimulus types: Click, Pure Tone, Tone Burst, Speech and User Defined Stimuli
2.7	Intensity: 0-100dB Nhl
2.8	Tone Burst 10 to 120 dB on 250 to 8000 Hz
2.9	Analysis time should be short
2.10	Masking : White noise or notched
3	Technical Specification for ASSR
3.1	Stimulus - Modulated Tone, Clicks
3.2	Intensity : up to 125 dB SPL
3.3	Frequency response up to 5000Hz or better
3.4	Should be able to test multiple frequencies simultaneously for both ears
3.5	Automatic Generation of Audiogram in SPL/ HL
3.6	Phasor diagram should be generated automatically.
3.7	Frequency and intensity based phasor diagram.
3.8	FFT Values should be displayed
3.9	Should have spectrum graph
4	Technical Specification for VEMP
4.1	It should be 2 channels

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4.2	Transducer type: Ear-Tone ABR insert phone
4.3	Stimuli: Click and Tone Bursts.
4.4	Should have automatic test protocols for Click and Tone burst.
4.5	Patient communication: Talk forward.
5	System Configuration Accessories, spares and consumables
5.1	Should include all the necessary software, hardware and accessories for BERA, ASSR, OAE, & VEMP without any additional cost.
6	Power Supply
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
6.2	Suitable UPS with maintenance free batteries.
7	Standards, Safety and Training
7.1	Manufacturer should have ISO certification and the copy of the same should be enclosed along with the technical bid.
7.2	The quoted model should have European CE/US FDA certification and copy of the certificate should be submitted along with the technical bid.
7.3	Comprehensive training should be given for staffs and engineers till familiar with the system.
7.4	Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.
7.5	Must submit at least 2 nos. of latest purchase order of the quoted model dated within 3 years along with the price bid.
7.6	Must submit at least 2 no. of unpriced PO copies and performance satisfactory report within last 5 years from reputed clients along with technical bid.
8	Documentation
8.1	Complete User/Technical/Maintenance manual to be supplied in English (Soft copy & Hard copy).
8.2	Certificate of calibration and inspection from factory.
8.3	Warranty & CMC as per tender terms.

8. TORCH PEN LIGHT

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C-VISION EQUIPMENTS

1.DIRECT OPHTHALMOSCOPE

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Direct Ophthalmoscope		
		
NAME AND CODING		
GMDN name		**Ophthalmoscope**
GENERAL USE		
1		
1.1	Clinical purpose	Direct ophthalmoscope is a hand-held and battery powered device containing illumination and viewing optics to examine the cornea, aqueous, lens, vitreous, and the retina of the eye.
1.2	Used by clinical department/ward	NICU & PICU
2	**TECHNICAL CHARACTERISTICS**	

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2.1	Technical characteristics (specific to this type of device)	1) Should be battery operated 2)Should have halogen light source 3)Should have red-free filters 4)Should have small and large spot sizes, fixation targets, slit aperture 5)Should have hemi-spot and cobalt blue filter 6)Should have wheel control with lens powers ranging from +20D to -35D in single diopter steps up to 10D and 5D steps above that. 7) Should have illuminated lens dial 8) Should have rubber brow rest 9) Should have dust free optics and a spherical optical system 10) Should be supplied with a carrying case. 11) Should have a sturdy large battery handles with rheostat adjustment. 12) Should be supplied with 1 spare bulbs.
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	NA
3	**PHYSICAL CHARACTERISTICS**	
3.1	Dimensions (metric)	Max: 50mm x 50mm x 250mm
3.2	Weight (lbs, kg)	Max: 150 g (excluding battery)
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	Handheld device
4	**ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)**	
4.1	Power Requirements	Recharging unit: Input voltage- 220V-240V AC, 50Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	NA
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	

	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	1)Replacement bulb/illumination source -10 Nos. 2)Rechargeable cell battery - 6 Numbers (in case disposable dry cell battery - 72Nos)
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	**ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS**	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)**Operating condition**: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2) **Storage condition**: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	1**) Disinfection**: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2) **Sterilization** not required.
7	**STANDARDS AND SAFETY**	
7.1	Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	Scanning laser ophthalmoscopes using Class 1 laser are exempt from this requirement: Electrical Safety: IEC 60601-1 Optical radiation hazards with ophthalmoscopes: ISO 10942 or ISO 15004
7.2	Local and/or international	Manufacturer / supplier should have ISO certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket; 2)Safety and operation check before handover;

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8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/ad-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

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2. STREAK RETINOSCOPE

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Streak Retinoscope		
		
NAME AND CODING		
GMDN name		Retinoscope, battery-powered
GMDN definition		A battery-powered, hand-held, ophthalmic instrument that is used to measure the refractive errors of the eye through the projection of a beam of light into the eye, and the observation of the movement of the illuminated area on the retinal surface and of the refraction of the emergent rays. The batteries may be of the rechargeable type, and are housed within the handle of the instrument. Also known as a skiascope and the method as sciascopy
GENERAL USE		
1		
1.1	**Clinical purpose**	Measure the refractive errors of the eye
1.2	**Used by clinical department/ward**	Ophthalmology
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	

2.1	**Technical characteristics (specific to this type of device)**	1. Working distance of 50cm and a+2.0D sphere 2. Lamp: 3.5/4V Xenon or 2.5V Halogen; 0.9A 3. Should allow one-hand operation for streak focus and 360º streak rotation. 4. Should have crossed-linear polarizing filter 5. Should have an external focusing sleeve which is easy to grip and manipulate 6. Should be interchangeable to plane mirror and concave mirror mode by sleeve movement 7. Should use halogen/Xenon streak lamp 8. Should have 100% dust proof housing and multi-coated optics. 9. Should have detachable brow rest for spectacle wearer
2.2	**User's interface**	Scope
2.3	**Software and/or standard of communication(where ever required)**	*in built*
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	230 mm length approx. (but not limited to)
3.2	**Weight (lbs, kg)**	150 gm approx. (but not limited to)
3.3	**Configuration**	NA
3.4	**Noise (in dBA)**	NA
3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	Rechargeable Battery only
4.2	**Battery operated**	Rechargeable battery which can be directly plugged in AC
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	As per device
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)**	Bulb – 5 nos.,Bulb holder, Bulb cover and carrying case
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	

6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISO 13485 certified manufacturer IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1: 2012 ISO 14971 : 2007 ISO 12865 - Ophthalmic instruments - Retinoscopes ISO 15004 - Ophthalmic instruments - General requirements and test methods IEC 6060-1-2 US FDA approved or CE certified product
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform installation, safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of Calibration and inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	Three years
9.2	**Maintenance tasks**	Maintenance manual detailing complete maintaining schedule
9.3	**Service contract clauses, including prices**	Local clinical staff to affirm completion of installation
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language. List to be provided of equipment and procedures required for local calibration and routine maintenance
10.2	**Recommendations for maintenance**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.
11	NOTES	

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11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Contact details of manufacturer, supplier and local service agent to be provided
11.2	**Recommendations or warnings**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.

3.ILLUMINATED NEAR VISION TEST DRUM

TECHNICAL SPECIFICATIONS		
Name	**ILLUMINATED NEAR VISION TEST DRUM**	
		
1	Clinical purpose	For testing near vision
2	Technical characteristics	Illuminated near vision test drum with four tests - English, Hindi, any regional language, ‘c’ and ‘e’ test

4. BINOCULAR INDIRECT OPHTHALMOSCOPE WITH A 20, 28 or 30 D LENS

MEDICAL DEVICE SPECIFICATION **(Including Information on the following where relevant/appropriate, but not limited to)**
Binocular Indirect Ophthalmoscope 

NAME AND CODING	
GMDN name	Ophthalmoscope

GENERAL		
1	USE	
1.1	**Clinical purpose**	To observe health of the retina and the vitreous humor
1.2	**Used by clinical department/ward**	Ophthalmology

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	I. Should Have all pupil feature II. Should have Brilliant halogen illumination which is easily adjustable III. Should have Stereo optical system IV. Should have Cobalt Blue and Green Filters to filter IR and UV rays V. Should be compact and light weight VI. Should have simple controls for adjusting the headband VII. Inter-papillary distance adjustable from 50-75mm VIII. Should include various hand held lenses but must have (20D) and (28D or 30D) aspheric biconvex lens. ix. wide angle diffuser
2.2	**User's interface**	Manual
2.3	**Software and/or standard of communication(where ever required)**	*NA*
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	light enough to be hand held
3.3	**Configuration**	NA
3.4	**Noise (in dBA)**	NA
3.5	**Heat dissipation**	NA
3.6	**Mobility, portability**	Portable
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	220V; 50 Hz
4.2	**Battery operated**	12 to 16 hours of backup with 6V, 5W output (lithium ion)
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	as applicable
4.6	**Other energy supplies**	NA

5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional), Spare parts (main ones), Consumables / reagents (open, closed system)**	Batteries, filters, lamp,

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BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	
7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISO 13485 Manufacturer; IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1: 2012 IISO 14971 : 2007 ISO 10943:2011 Indirect Ophthalmoscope ISO 15004 Ophthalmic Instruments- General requirements and test methods US FDA approved or CE certified product
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	NA
8.2	**Requirements for sign-off**	NA
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	Three year
9.2	**Maintenance tasks**	NA
9.3	**Service contract clauses, including prices**	NA
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Required
10.2	**Other accompanying documents**	NA
10.3	**Recommendations for maintenance**	NA
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Should provide complete contact details of sales and service departments.
11.2	**Recommendations or warnings**	NA

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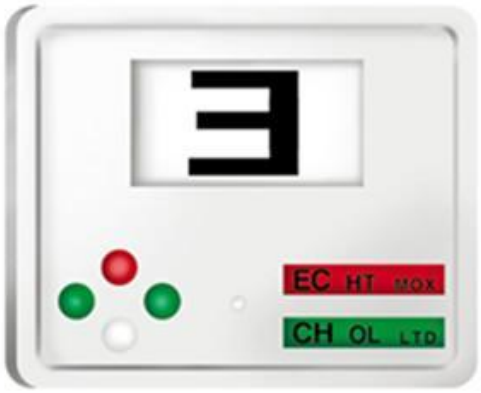
11.2	Recommendations or warnings	Any warning signs would be adequately displayed
11.2	Recommendations or warnings	

5. VISION TESTING DRUM

TECHNICAL SPECIFICATIONS		
Name	**Distance Vision testing drum**	
		
1	Clinical purpose	For testing distance vision
2	Technical characteristics	Should be Design to suit all refraction rooms and easily mountabl on refraction unit and wall • Compact & light weight • Remote control with Cord • Pleasing color to match all interiors • Include color deficiency test • The regular sequence of charts should have – English – Hindi – Regional Language – C Chart – Dot Chart – All charts are available up to 6/4 vision (over correction)

TECHNICAL SPECIFICATIONS		
3	Technical Specifications	Power Supply (Main): A/C 230V, 50 Hz, Two or Three Pin Plug, 5A Battery-Cell: 9V battery-cell for cord-less remote No battery-cell required for corded remote Size of Unit: H: 135 mm, W: 340 mm, L: 325 mm Size of Unit with Packing: H: 180 mm, W: 400 mm, L: 450 mm Weight of Unit: 9.00 K.G. (Kilograms) Weight of Unit with Packing: 9.50 K.G. (Kilograms) Packing: Unit should be supplied with high grade thermocol box plus cardboard box

6. LEA GRATING PADDLES : LEA GRATING PADDLES-

TECHNICAL SPECIFICATIONS	
Name	**LEA GRATINGS paddle**
	

1	Clinical purpose	For preferential looking test situations with infants or children and adults with disabilities to determine detection acuity among normal children from birth to 3 years and also among older children suffering from cognitive problems or disabilities.
2	Technical characteristics	-Grating levels printed on each handle should be: 0.25, 0.5, 1.0, 2.0, 4.0 and 8.0 c/cm (cycles per centimeter of surface); -Should include instructions and storage case. 4 paddles 8" (20 cm) in diameter; -Should be made of HDPE [high density polyethylene] or any other non-tear water proof surface with plastic/wooden handle;

7. LEA NEAR SINGLE SYMBOL PLAYING CARDS-

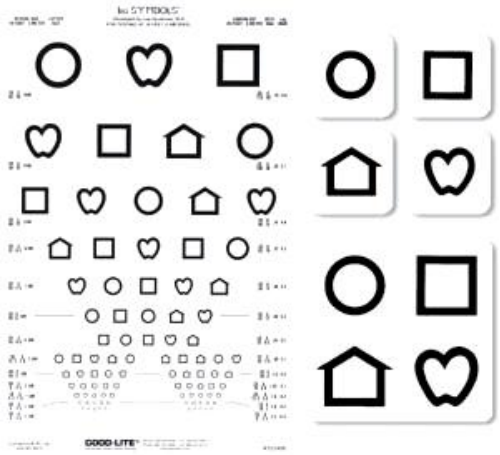
TECHNICAL SPECIFICATIONS		
Name	**Near Vision test with Lea symbol (Lea playing card set)**	
		
	These specially designed playing cards make it easy to measure near visual acuity in young children, while teaching concepts of similar/ different, /small, bigger/smaller. The 4 packs contain 16 cards each with symbols of varying sizes: 16M and 10M, 6.3M and 4M, 2.5M and 1.6M, and 1M and 0.63M. Includes training cards and instructions. The paper cards measure 1.6" x 2.75" (4 cm x 7 cm). Serial Number 252500	
1	Clinical purpose	For measuring the visual acuity of very young children. It is used in examination of older children with brain damage to reveal the difference between visual acuity values measured with the Playing Cards and with single optotypes, line test and tightly crowded optotypes. It functions also as regular teaching material when a child is learning the concepts of similar/different, big/small, and bigger/smaller.
2	Technical characteristic s	-The 4 packs should contain 16 cards each with symbols of varying sizes: 16M and 10M, 6.3M and 4M, 2.5M and 1.6M, and 1M and 0.63M; -Should include training cards and instructions. -The paper cards measurement should be 1.6" x 2.75" (4 cm x 7 cm); -Should be made of HDPE [high density polyethylene] or any other non-tear water proof material;

8. LEA Symbols Near Vision Card (16 inches/40 centimeters)-

TECHNICAL SPECIFICATIONS		
Name	**LEA Symbols Near Vision Card (16 inches/40 centimeters**	
		
1	Clinical purpose	Lea symbol chart fulfils the criteria to be a good vision screening chart for pre-school children i.e. less than 6 years (3to 5 years) age group for **assessing a child's functional vision at near distances**. The chart contains very familiar 4 symbols like circle, square, house and apple. This test measures near visual acuity with proportionally spaced (log MAR) lines on the front and lines with 25% and 50% spacing on the back. The tighter spacing often reveals difficulties in seeing tightly spaced details, which should be known when a child is learning to read. Response key printed on test card. The more crowded test with 50% and 25% spacing between the optotypes is a sensitive test to detect the **increased crowding phenomenon**. 50% spacing means that the space between the optotypes is one half of the width of the optotypes. *Older children may be tested using the reverse side of the near vision card where the same symbols are spaced more closely, as if reading in words or sentences. The testing procedure is the same as for binocular testing on the front of the card. The close spacing of the symbols on this test makes it a sensitive test* ***for the detection of mild amblyopia***

TECHNICAL SPECIFICATIONS		
2	Technical characteristics	-All optotypes should be of similar legibility; -Each line should have optotypes size ranging from 20/400 to 20/10 (6/120 to 6/3) equivalent, -Proportional spacing between the optotypes on one side - More tightly-spaced symbols on the opposite side with 25% and 50% spacing ; --Should have 16 inches/40 centimeters -Lea Near Vision Chart; -- Should have measuring cord for measuring 16 inches or 40 cm -Student response or training card; -Conditioning Flash cards; -Should be made of HDPE [high density polyethylene] or any other non-tear water proof material; - Card size should measure at least 8" x 10" (20.3 cm x 25.4 cm)

9. LEA SYMBOLS 13-LINE TRANSLUCENT DISTANCE CHART (10 FEET/3 METERS)

TECHNICAL SPECIFICATIONS		
Name	**LEA Symbols 13-Line Translucent Distance Chart (10 feet/3 meters) & Conditioning Flash cards**	
		
1	Clinical purpose	Lea symbol chart fulfils the criteria to be a good vision screening chart for pre-school children i.e. less than 6 years (3to 5 years) age group. The chart contains very familiar 4 symbols like circle, square, house and apple.

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TECHNICAL SPECIFICATIONS		
2	Technical characteristics	-All optotypes should be of similar legibility; -Each line should have 5 letters (at visual acuity better than 20/100); - Line sizes range from 20/125 to 20/8 (6/38 to 6/2.4) -Proportional spacing between the optotypes; -Should have 0.1 Log MAR decrements in optotype size; -Should have 10 feet Lea Vision Chart; -Student response card; -Conditioning Flash cards; -Should be made of HDPE [high density polyethylene] or any other non-tear water proof material;

10. LEA 3-D PUZZLE:

The LEA 3-D Puzzle is designed for training and assessing typically developing toddlers and other young children. The puzzle also serves as an assessment tool for individuals with brain damage or for older children and adults with low cognitive abilities. It Includes instructions and the booklet: Assessing Vision Development through Pictures and Shapes. Tray is 6.75" x 6.75" (17.2 cm x 17.2 cm). The 4 symbol puzzle pieces are 2" x 2" (5.1 cm x 5.1 cm) each.

11. HIDING HEIDI LOW CONTRAST FACE TEST , DOUBLE SIDED

Visual communication is the most important communication method during the first year of life. The ability to detect objects of low contrast is an important component of the visual system. For example, facial expressions are mediated by faint shadows and changes in the contours of the mouth and eyes. Determining the levels of contrast that an infant can detect helps provide baseline data for evaluating future changes. For example, deviations from usual behavior may indicate disorders that leave vision at high- contrast levels unaffected. Hiding Heidi Low Contrast Face Test is available in 2 different versions: **Double Sided:** Four cards printed on both sides in the following contrast levels: black, 25%, 10%, 5%, 2.5%, and 1.25%. Cards are 9" x 9" (23 cm x 23 cm). Includes instructions.

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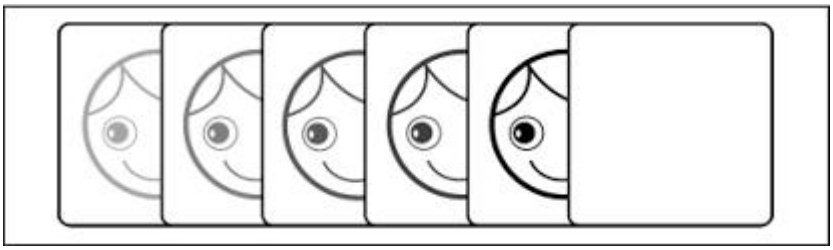
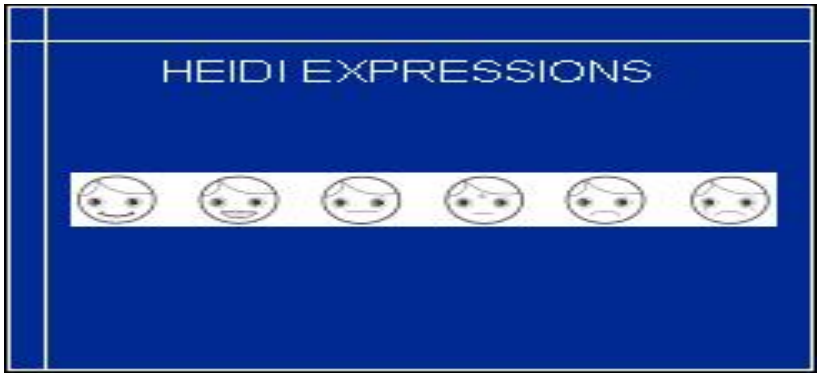
TECHNICAL SPECIFICATIONS		
Name	**Hiding Heidi Low Contrast Face Test.**	
		
1	Clinical purpose	For assessment of vision for communication, by using low contrast picture of face in children who are unable to respond verbally or by pointing.
2	Technical characteristics	-Low Contrast Face Test-Should have multiple testing cards with variable contrast between 0-100% contrast; -Should be made of HDPE [high density polyethylene] or any other non-tear water proof material;

12. HEIDI EXPRESSIONS TEST GAME

Heidi Expressions Test Game: Some children with brain damage-related vision loss may achieve near normal results in routine vision tests (large visual field and normal or near normal visual acuity), but cannot interpret facial expressions or recognize people's faces. The Heidi Expressions test game improves early evaluation of vision for communication.
18 cards per set. Cards are 4" x 4" (10.16 cm x 10.16 cm).

TECHNICAL SPECIFICATIONS	
Name	**Hiding Heidi Low Contrast Face Test.**
	

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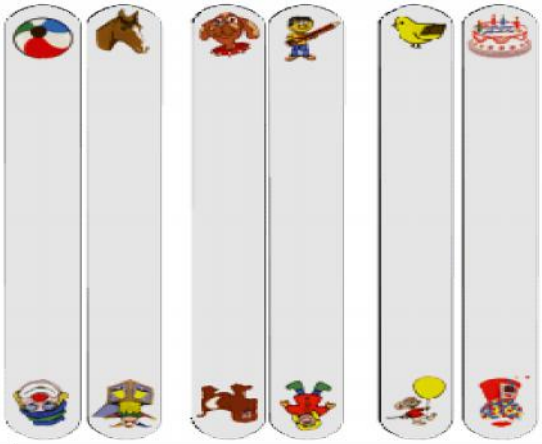
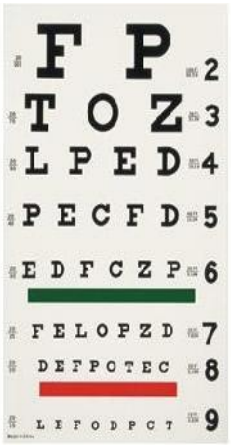
TECHNICAL SPECIFICATIONS		
1	Clinical purpose	Perceiving expressions is also a specific visual function. We can assess a child's ability to perceive basic facial expressions and the emotional states related to them by playing with the Heidi Expressions Game that consists of pairs of cards with six basic expressions. Of each expression there are two cards that are exactly alike and a third where Heidi has a bow. If a child does not see the difference in the expressions (s) he/she may pick as the similar ones the cards where Heidi has the bow. In that case we accept the choice as correct because of the bow but ask the child to look whether the two faces are alike: "Is Heidi glad or sad in both pictures?"When matching the pictures of Heidi without the bow the child may not find the pair even among only a few cards. If the child does not seem to understand what we mean with expressions, a thorough study of expressions is needed. Many children have Cerebral Palsy, which may be so mild that it has not required special treatment. If the child's difficulties are not known and understood, his/her behavior may cause misunderstandings and needless negative experiences in social interactions. Therefore, testing of a child's ability to see differences among different facial expressions is an important part of functional visual assessment. Vision impaired children have two different kinds of problems in learning to recognize faces and to interpret: a) *they do not see expressions well enough to interpret them (=pathway problem)* or b) they *have brain damage in the area of face recognition and, therefore, do not recognize differences in people's faces and may also have difficulties in interpreting expressions (= cognitive visual problem).* These children are unable to gather information related to faces from the visual information entering the brain because the normal Top-Down demand for face information does not exist. They are unaware of faces. These children should be diagnosed early so that we can use other functions to support their development in communication. The Heidi Expressions Test Game should be included in the assessment of early visual processing whenever a child has symptoms of face blindness.
2	Technical characteristics	- Should have cards with various expressions - Cards should be adequate for each expression to help in matching and the size should be at least 4" x 4" (10.16 cm x 10.16 cm). -Should be made of HDPE [high density polyethylene] or any other non-tear water proof material;

13. LEA FIXATION STICK

TECHNICAL SPECIFICATIONS		
Name	**Lea Fixation Stick**	
		
1	Clinical purpose	Lea fixation stick has grating on the other side a 5 cm face or symbol that infants at 3 months typically fix and follow. Pediatric fixation sticks provide a series of detailed accommodation-stimulation targets for the young patient. The targets are calibrated for near Included is (as examples) a clown face, a dog, a beach ball, etc. Each target is in brilliant color for patient ease.
2	Technical characteristics	-The set should consists of three (3) extremely durable plastic sticks with both sides utilized for targets; -Single sticks can be used for performing various tests: unilateral (cover/uncover) test at near, alternating cover test at near, pursuit testing, near point of convergence (NPC), motilities (ductions and versions), vergence facility at near, fixation stability at near in diagnostic positions of gaze, amplitude of accommodation, and accommodative facility; -Dual sticks with different optotypes exposed to the patient can be used for saccade testing;

14. SNELLEN'S CHART

TECHNICAL SPECIFICATIONS		
Name	**Snellen's chart**	
		
1	Clinical purpose	For testing visual acuity in adults
2	Technical characteristics	-Should have 20/20 Vision Activity – Eye Chart; -Should have minimum 30inches X 10inches (Length X Width) size; -The chart should consists of rows of individual black characters printed on a white background; -The first row should be a single large letter, with letters becoming more numerous and successively smaller with each additional row; -Should be made of HDPE [high density polyethylene] or any other non-tear water proof material;

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15. EYE SPECULUM (ALFONSO INFANT WIRE SPECULUM)

TECHNICAL SPECIFICATIONS		
Name	**Eye Speculum (Infant wire speculum)**	
		
1	Clinical purpose	To keep the eyes open during any operation; light wire instrument.
2	Technical characteristics	-Should have a size of 7/8" (infant size); -Should have 5.0mm closed wire blades; -Should have 27.0mm blade spread, nasal approach;
3	User's care, Cleaning, Disinfection & Sterility issues	Sterilizable and cleanable using alcohol and other chemical reagents
4	Warranty	3 Years

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16.SCLERAL DEPRESSOR (WIRE VECTIS)

TECHNICAL SPECIFICATIONS		
Name	**Scleral depressor (wire vectis)**	
		
1	Clinical purpose	A loop of wire attached to a stack used to extract cataract affected lenses. Specially designed for providing effective safety for eyes.
2	Technical characteristics	-Made of medical grade stainless steel; -The instrument shall be free from burrs, pits, cracks and other surface defects; -The edges shall be even and rounded; -The soldering of the shank to the handle shall be neat and sound; -The working ends shall be polished bright and passivated; -Handle should have minimum 10mm length;
3	User's care, Cleaning, Disinfection & Sterility issues	Sterilizable and cleanable using alcohol and other chemical reagents
4	Warranty	3 Years

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17.LASER CONSOLE PLUS LASER INDIRECT OPHTHALMOSCOPE WITH PROTECTIVE GLASS

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Laser console plus laser indirect Opthalmoscope with protective glass		
NAME AND CODING		
GMDN name		Ophthalmoscope
GMDN code(s)		CT1184
GMDN definition		As in GMDN (http://www.gmdnagency.com)
GENERAL		
1	USE	
1.1	**Clinical purpose**	To observe health of the retina and the vitreous humor
1.2	**Used by clinical department/ward**	Opthalmology
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	**Technical characteristics (specific to this type of device)**	i. Wave Length: Diode laser 532nm (maximum) ii. Adjustable laser power: 50 to 2500m W iii. Aiming beam through LIO- red diode, aiming beam focus and adjustment knob: Adjustable delivered out of Laser Indirect Ophthalmoscope iv. Diameter of laser spot: 50 to 500 micro meter v. Should have digital control and continuous wave vi. Filters: Cobalt blue, Red Free and yellow vii. Lamp: Good illumination bulb and at least 10 extra LIO bulb viii. At least one extra optic fiber cable set ix. Capable of Exposure times: 0.01-5.00 seconds Automation repeat within :0. 1-1.0 seconds intervals x. Should include various hand held lenses but must have (20D) and (28D or 30D) aspheric biconvex lens.
2.2	**User's interface**	Manual
2.3	**Software and/or standard of communication(where ever required)**	*NA*
3	PHYSICAL CHARACTERISTICS	
3.1	**Dimensions (metric)**	NA
3.2	**Weight (lbs, kg)**	750 gm maximum
3.3	**Configuration**	NA

3.4	**Noise (in dBA)**	<60dBA
3.5	**Heat dissipation**	Air cooled system
3.6	**Mobility, portability**	Yes
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	**Power Requirements**	220 Vac, 50 Hz, <3A, 50/60Hz Single phase or 110 Vac, <6A, 50/60 Hz Single phase
4.2	**Battery operated**	NA
4.3	**Tolerance (to variations, shutdowns)**	NA
4.4	**Protection**	NA
4.5	**Power consumption**	as per device

5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	**Accessories (mandatory, standard, optional), Spare parts (main ones), Consumables / reagents (open, closed system)**	Optic fiber cable , bulbs, 500VA CVT, one extra set of goggles for eye protection of the Assistant 810 nm Protective glasses, 20 D/ 28 D lens with a clear aperture of 51mm and 45 degree retinal field of view, optional Retcam and optional camera (if one is going for Ret Cam).
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	**Atmosphere / Ambiance (air conditioning, humidity, dust ...)**	Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%. Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90%.
6.2	**User's care, Cleaning, Disinfection & Sterility issues**	Complete unit to be easily washable and sterilizable using both alcohol and chlorine agents.
7	STANDARDS AND SAFETY	

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7.1	**Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international**	ISO 13485 Manufacturer; IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1: 2012 ISO 14971 : 2007 ISO 10943:2011 Indirect Ophthalmoscope ISO 15004 Ophthalmic Instruments- General requirements and test methods IEC 60825 for Lasers for laser products IEC 60601-2-22 IEC 6060-1-2 US FDA approved or European CE certified product
8	TRAINING AND INSTALLATION	
8.1	**Pre-installation requirements: nature, values, quality, tolerance**	Supplier to perform installation, safety and operation checks before handover.
8.2	**Requirements for sign-off**	Certificate of Calibration and inspection from the factory.
8.3	**Training of staff (medical, paramedical, technicians)**	Training of users in operation and basic maintenance shall be provided
9	WARRANTY AND MAINTENANCE	
9.1	**Warranty**	three years
9.2	**Maintenance tasks**	maintenance manual detailing complete maintaining schedule
9.3	**Service contract clauses, including prices**	Local clinical staff to affirm completion of installation
10	DOCUMENTATION	
10.1	**Operating manuals, service manuals, other manuals**	Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language. List to be provided of equipment and procedures required for local calibration and routine maintenance
10.2	**Other accompanying documents**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.
11	NOTES	
11.1	**Service Support Contact details (Hierarchy Wise; including a toll free/landline number)**	Contact details of manufacturer, supplier and local service agent to be provided
11.2	**Recommendations or warnings**	List to be provided of important spares and accessories, with their part numbers and cost. Certificate of calibration and inspection to be provided.

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18. SPECTACLE OCCLUDER	Features a multiple pinhole flipper and an angled handle to keep hand away from mouth during use. Made of impact resistant plastic, it can be sterilized with any non-solvent based germicide Spectacle Occluder

D. DENTAL EQUIPMENTS

1. PAEDIATRIC DENTAL CHAIR

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
	Electronic Dental Chair	
GENERAL		
1	USE	
1.1	Clinical purpose	For use of dental examination to do dental procedures
1.2	Used by clinical department/ward	Dental Clinic
TECHNICAL SPECIFICATIONS		
2.1	Technical characteristics (specific to this type of device)	(A)CHAIR UNIT: 1)Fully motorized ,pneumatically/electrically driven,which gives smooth and non-jerky start and stop; 2)Lowest height range should be between 300-450 mm to improve visibility and access; 3)Chair should have toe movement. While backrest moves down, toe should move up; 4)Chair should have safety brake system while going down for patient exit position; 5)The design should enable the operator to be close to the patient to be close to the patient to provide optimum vision of the operating field and safe control of all component devices;

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		6)Streamlined cast metal base with provision for good stability; 7)The base and other structure should have a corrosion resistant coating; 8)The backrest should be ultra thin, flexible, highly comfortable, seamless long life holstery and should be disinfectable; 9)The chair should be designed to provide good ergonomics for both operator and assistant; 10)Chair should have adjustable ergonomic headrest with adjustment of height and angle; 11)Chair should have adjustable ergonomic hand rest for the convenience of patient's easy mounting and dismounting from the Chair, the Right Hand rest can be swung out by 90 degree;
		12) Should have integrated power supply for hand pieces, electric motor etc; 13)All the outlet & inlet for the services to the chair should be concealed in the box to be at the foot area of the chair or within the unit, as an infection control measure. 14)Electrically operated, Spittoon attachment, Halogen/LED light, Air Ventury Suction, micromotor, airotor, light cure unit, Scaler, 3 way syringe, X ray viewer, instrument tray, dental operators stool with height adjustment. Oil free, bacteria free, moisture free compressor. 15) Minimum of lifting capacity not less than 200Kg;. 16)Single multi-functional foot control for all chair movement &dental light operation to avoid cross - contamination; 17) Should be electrically operated with zero Programing. **DENTIST ELEMENT** 1)Overhead delivery system consisting

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		of (a)3 way syringe (b)4-hole handpiece hose for air turbine, air motor, scaler and light cure(with LED light unit) 2)Module system with brushless micro motor with contra – angle hand piece, one super torque airotor hand pieces. 3) Should have ultra sonicscaler with standard tips. 4) Should have infection control system (Bios stem) with Non Retraction Valves. 5) Should have air - pressure meter. 6) Should have Instrument tray.
		ASSISTANT ELEMENT • Assistant element should be fitted with three way syringe, high volume wet line suction unit with saliva ejector. • Aerosol suction volume should be 250-300 l/min. **DENTAL OPERATORY UNIT** 1) Control Panel: -Switch for Hand Foot operation -Switch for Forward/Reverse -Switch for Scalar ON/OFF -Speed Indicator Display -Switch for Speed Increase -Switch for Speed Decrease -Control Knob for water spry -Control Knob for scalar spray -Air Filter -Air Regulator -Pressure gauge; 2)Should have control box with water control – Air motor and hand piece (straight and contra angle), air rotor hand piece. One Turbine connection with handpiece; 3)X-Ray viewer: Should provided with high quality brighter illumination with latest technology for maximum working life; 4)Should have minimum 4 handpiece holder positions; 5)Ultrasonic scaler with standard tips:

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		-operating frequency range : 24,000 - 36,000 Hz -Water pressure: Min. 1.0 bar. Max. 5.0 bar. -detachable Autoclavable handpiece -Tips must be screwed in and moderately tightened using the key -Heat generated due to high frequency vibration is cooled by the continuous flow of water and sprayed from the activated tip;
		6)Airotor: -Should have solid Titanium Body which is scratch resistant -Low noise level with virtually no vibration -Ceramic Ball bearing Coupling System -should have twist type chuck release; -Should have body shape to gain easy access to posterior area -Small Head possible to facilitate posterior area preparations -Effective water spray to cool the entire operating field -Max speed up to 400000 rpm; 7)Micromotor and contra angle handpiece: -Speed range of 300 - 40000 RPM in standard mode with cutting power in the range between 50 - 70 watts, scratch resistant, Titanium Body; -High torque from Low to High Speeds -Forward & Reverse rotation by selection switch -Flexible cord for smooth maneuverability of Micromotor; 8)LED Curing Light source: -Should include one curing light hand-piece -10mm light guide -Eye shield and three curing discs -Fan-free for silent operation -Multiple-setting light timer with

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		easy, push-button control, offers preset cure times of 5, 10, 15 and 20 seconds, a continuous 120-second mode
		9)Cuspidor(Spittoon): -a)Saliva ejector -b)Autoclavable High volume evacuator -c)Autoclavable syringe -d)High quality stain proof vitreous China bowl with adjustable cup fill and bowl -e)Clean water bottle system; 10)Operating Light: -a)Dental Light should have variable intensities of lux from 5000 to 35,000. It should be LED reflected light or Halogen lamp with antiglare protection shield and maximum degrees of rotation of light arm movements -b)Light Head with axial movements - Horizontal, Vertical, Axial and diagonal adjustment -c)LED light 5000 K cool light or similar high quality light; 11)Compressor: A suitable Medical grade oil Free Compressor, which should be Noise less, and Minimum of 0.75HP. It should have: -Air moisture filter -Epoxy coating to prevent rusting -Pressure gauge and auto cutoff switch -Tank should have a capacity of minimum 35 liters Auto head air release valve / drain valve -The provision for drainage of water from the base tank of compressor -Safety release valve -Aluminum cover to be provided for compressor;

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		12)X-ray Viewer: -Light source should be LED and have brightness >400 -Should have a maximum viewing area 300mm width x 150mm height -Should have dental x-ray film holder -Should have power ON/OFF button -Should have adjustable illumination control knob/button;
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	Should have two preset & two user-selectable programs.
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	It should have maximum height 80 to 90 cm & minimum height up to 45-50cm.
3.2	Weight (lbs, kg)	NA
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	Handheld device
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Recharging unit: Input voltage- 220V-240V AC(specially designed for Indian condition),50Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	NA
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	

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5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	Should be provided with Doctor's stool(with up & down movement facility) & with adjustable backrest tilt. The range of up and down movement should be at least 4-6 inches. Doctor's stool 1.Cast-metal/alloy base with five tile castors; 2. Two way adjustable lumbar support; 3. Integral Gas cylinder for height adjustment; 4. Height range between 400 - 700 mm; Assistant's stool 1. Cast-metal/alloy base with five tile castors; 2. Height adjustable torso support with height adjustable foot ring; 3. Integral Gas cylinder for height adjustment;

BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2)Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	1)Disinfection: Parts of the Device that are designed to come into contact with the patient or the operator should either be capable of easy disinfection or be protected by a single use/disposable cover. 2)Sterilization for all hand piece.
7	STANDARDS AND SAFETY	

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7.1	Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	Should be CE (EU)/FDA (US) approved. All the hand
7.2	Local and/or international	Manufacturer / supplier should have ISO 13845 certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket; 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years (including all hand piece)
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;

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11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/add-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

2. WALL MOUNTED DENTAL X- RAY

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Wall mounted dental X-ray		
		
GMDN name		Dental X -ray systems and associated devices

GENERAL USE		
1		
1.1	Clinical purpose	Used for x-ray of teeth.
1.2	Used by clinical department/ward	Used for intraoral x-ray of teeth
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	Technical characteristics (specific to this type of device)	1. Wall mounted, compact, digital, AERB type approved unit; 2. Intra oral X- ray unit should be based on DC current, tube voltage, selection: 60- 65- 70 kVp, tube current 6mA/ 8 mA, focal spot 0.7 x 0.7 mm, total filtration>2 mm Al, minimum range of exposure time range – 0.02 to 3.2 secs, 3. Manufactured with international Safety standards for radiation leakage, electronic selection of exposure time/radiation according to tooth number. It should be possible to select exposure time manually 4. Should have audible & visual indication of "x-ray on" 5. Should have a option of remote hand held trigger botton 6. X-ray tube head should have swing angulations of at least 290º in the vertical plane and 360 º continuous rotations in the horizontal plane. 7. X-ray tube head should have angle indication 8. Should have a counter balanced arm mechanism. **Lead Apron and thyroid guard:** -Should be AERB approved. - Should be 0.5mm lead equivalent.

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		- Should be hook and loop type (Velcro fitting). - Should be supplied along with thyroid guard.
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	NA
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	1)Wall support (12 cm width, 24 cm height, 9 cm depth) 2)30, 60, and 80 cm extension arms
3.2	Weight (lbs, kg)	Max: 6.5kg
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	NA
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Input voltage- 220-240VAC± 10%, 50-60Hz
4.2	Battery operated	NA
4.3	Tolerance (to variations, shutdowns)	± 10%
4.4	Protection	NA
4.5	Power consumption	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	1) Should be supplied lead apron. 2)Rectangular Collimator Adaptor

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BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2)Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	STANDARDS AND SAFETY	
7.1	Certificates (pre- market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid. IEC 60601-1-3,IEC 60601-1-2,IEC 60601-2-7/28/32,IEC 336/1993
7.2	Local and/or international	Manufacturer / supplier should have ISO 13845 certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket; 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	

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9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/ad-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

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3. TABLE TOP FRONT LOADING AUTOCLAVE (ELECTRICAL)

MEDICAL DEVICE SPECIFICATION (INCLUDING INFORMATION ON THE FOLLOWING WHERE RELEVANT/APPROPRIATE, BUT NOT LIMITED TO)		
Table top front loading Autoclave		
		
NAME AND CODING		
GMDN name		Sterilizers
GENERAL USE		
1		
1.1	Clinical purpose	Table Top Front Loading Steam Sterilizer for sterilization processes in dental department
1.2	Used by clinical department/ward	Dental clinic
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	

2.1	Technical characteristics (specific to this type of device)	1)It should have capacity of 17-22 Liter; 2)It should be microprocessor controlled; 3)It should have separate steam generating chamber; 4)3 times pre vacuum & 1 time post vacuum with dry cycle; 5)It should have LCD display; 6)Programs: -Emergency 134 /4 min flash cycle -Solid: 134 degree C/ 4min for nude and Hollow 121 degree/ 20 min packed hollow instruments -Hollow: 134 degree C/ 4 min for nude and hollow 121 degree/20 min for packed hollow instruments -Porous: 134 degree C/4 min for porous and 121 degree C/20 min for packed porous instruments. -Vacuum: 5 min vacuum test program; 7)Single door, self-sealing with high-quality silicone gasket;
2.2	User's interface	5 sterilization cycles with option to run wet or Wet & Dry cycles with automatic change over.
2.3	Software and/or standard of communication(where ever required)	1.User selectable Pre-vacuum, Power Failure Memory, Automatically restarts on Power Consumption, (for custom program), 2.Preferably with a computerized control unit ensuring a fully automatic sterilization cycle, control and monitoring of physical parameters and a clear documentation of the sterilization cycle controls the autoclave.
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	Table top
3.2	Weight (lbs, kg)	Table top
3.3	Configuration	NA

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3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	Table top
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Input voltage- 220V AC +/- 10%, 50Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	+/- 10%
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	NA
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2)Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	STANDARDS AND SAFETY	

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7.1	Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	Device is certified according to CE (EU) or FDA 510k or equivalent.
7.2	Local and/or international	Manufacturer / supplier should have ISO 13845 certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5/15 amp socket; 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy and soft-copy) of:- 1)User, technical and maintenance manuals to be supplied in english language along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Service and operation manuals

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		(original and copy) to be provided; 4)Advanced maintenance tasks documentation; 5)Certificate of calibration and inspection
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Proposal for full service AMC, year 1 to 5, covering (i) 4 preventive maintenances per year, (ii) on-call technical interventions, spare parts and travel
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

4. LED CURING LIGHT SOURCE

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
LED Curing Light Source		
		
NAME AND CODING		
GMDN name		**LED Curing Light Source**

GENERAL USE		
1		
1.1	Clinical purpose	Used as a source of light. The process of UV light curing is defined as the hardening of a liquid form of materials when exposed to ultraviolet energy. Ultraviolet curing of inks, coatings, and adhesives require a "high intensity" source of UV energy to initiate a chemical reaction. This cross-linking reaction hardens the liquid by initiating a chemical polymerization reaction that turns the liquid into a solid. The resulting ‘hardened’ solids have long- life resiliency, color, and adhesion.
1.2	Used by clinical department/ward	Dental clinics
TECHNICAL		
2	**TECHNICAL CHARACTERISTICS**	

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2.1	Technical characteristics (specific to this type of device)	1)SMPS Adapter to prevent current surge from 110VAC-240VAC. 2)Ergonomically and Aesthetically designed for easy handling and efficiency. 3)Working time in each mode mode Peak -10 secs Gradual 15 secs Fluctutation 20 secs 4)Buzzer sound for every 3secs 5)Fibre optic stem comes with protector for eye protection. 5)2 way slide switch for working in main 230VAC and battery 6) Small, cordless wand-style light. 7)Well-balanced weight of the handpiece is 250 g—which is significantly lower in weight compared to G-Light and L.E.Demetron II. 8)Unique, ergonomic V-shape allows a comfortable grip from various angles to accommodate different techniques and indications. 9)Two light guides (10 mm and 3 mm) for larger and confined surface areas. Unique magnetic light guide mount makes it easy to switch from one to the other. 10)Light guide rotates 360° to help reach all areas of the mouth. Light guide geometry allows for easy intra-oral handling. 11)Innovative design eliminates need for noisy fan and includes a switch-off option for beep signals for completely silent operation. 12)Smooth, vent-free stainless steel exterior allows fast disinfection between patients. 13)Large buttons with touch response.
		14)Eye shield rotates 360° to accommodate different techniques and indications; it also serves as a flat surface rest.
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	NA
3	**PHYSICAL CHARACTERISTICS**	
3.1	Dimensions (metric)	Charger:Length 170 mm (6.69 in), Width 95 mm (3.74 in), Height 50 mm (1.96 in) Hand piece:Diameter 28 mm (1.10 in), Length 270 mm (10.63 in)
3.2	Weight (lbs, kg)	Charger: 660g , Handpiece:250 g (incl. light guide)

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3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	Handheld device
4	**ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)**	
4.1	Power Requirements	Input voltage- 220VAC ± 10%, 50Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	± 10%
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	15W
5	**ACCESSORIES, SPARE PARTS, CONSUMABLES**	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	NA

BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	**ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS**	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2)Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	**STANDARDS AND SAFETY**	

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7.1	Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	Should have CE (EU) or FDA (US)
7.2	Local and/or international	Manufacturer / supplier should have ISO 13845certificate for quality standard.
8	**TRAINING AND INSTALLATION**	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket; 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	**WARRANTY AND MAINTENANCE**	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	**DOCUMENTATION**	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	**NOTES**	

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11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/add-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

5. AUTOMATIC WATER DISTILLER

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Automatic Water Distiller		
		
NAME AND CODING		
GMDN name		NA
GMDN code		NA
GENERAL USE		
1		

1.1	Clinical purpose	To get distilled water to use in dental chair for proper care of the equipments. WATER DISTILLERS are ideal for producing clean, healthy water for many applications related to health, as well as maintaining your products which use water. Used for

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		dental products, vaporizers, humidifiers, and many more.
1.2	Used by clinical department/ward	Dental clinics
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	Technical characteristics (specific to this type of device)	1)Should easily connect directly to the tap water source using a 1/4" line for on-demand distilling.and reduces 99% total dissolved solids; 2)Should be a fully automatic model and compact design. Automatically stops when distilled water storage tank is full, and starts distilling automatically when the distilled water level drops; 3)Should feature an efficient, quiet running, and long-lasting cooling machanism; 4)Should have water level sensors to control water level inside boil chamber and collection water tank; 5)Should have a Raw water inlet control valve; 6)Should use an electronic circuit board to control the flow from water inlet, boiling process, and control of water level in distilled water storing tank; 7)Should have a residue discharge valve for easy discharge of residue and cleaning of boiling chamber; 8)Production rate of water distiller should range from 3gal/day to 12 gal/day; 9)Water Distiller Baffle Distance - When water boiled it is first converted to wet steam and then to dry steam through water distillation; 10)Water Distiller Construction - The best construction material is stainless

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		steel; 11)Water Distiller Storage Containment - 90% of contaminants removed from tap water after distillation; 12)Should compatible with all type of dental chairs;
2.2	User's interface	Manual/automatic
2.3	Software and/or standard of communication(where ever required)	NA
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	NA
3.2	Weight (lbs, kg)	NA
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	NA
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Recharging unit: Input voltage-220-240VAC ± 10%, 50/60 Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	± 10%
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	1)Charcoal pre-filter (minimum 6 Qty) 2)Water Supply Line 3)Installation kit

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BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2)Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	STANDARDS AND SAFETY	
7.1	Certificates (pre- market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	Instrument should be CE (EU) marked or USFDA or EN ISO approved;
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket(Type D); 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years (Including filters replacement during warranty period)
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;

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9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/add-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

6. FORCEPS SET FOR EXTRACTION (ADULT AND PEDIATRIC)

TECHNICAL SPECIFICATIONS	
Name	**Forceps set for extraction (Adult and Pediatric)**
	

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1	Clinical purpose	For tooth extraction
2	Technical characteristics	-Forceps should have precise, anatomically-designed beaks for a sure, effective grip; -Forceps should have optimum Rockwell hardness for optimum tensile strength; -Thick non-slip handle with minimum 10mm length; -Instruments should be CE (Europe)/ISO certified or FDA (US) certified; **-Extraction Forceps (Adult):** Lower anterior Lower molar Lower premolar Upper anterior Upper molar (Left) Upper molar (right) Upper premolar Upper root forceps anterior Upper root forceps posterior Upper cow horn forceps Lower cow horn forceps; **-For Pediatric:** Lower anterior Lower molar Upper anterior Upper molar (Left) Upper molar (right)
3	User's care, Cleaning, Disinfection & Sterility issues	All instruments should be Autoclavable

TECHNICAL SPECIFICATIONS		
4	Warranty	Forceps should have maximum (lifetime) warranty against defects in material and workmanship

7. RESTORATIVE FILLING AND CARVING INSTRUMENTS SET

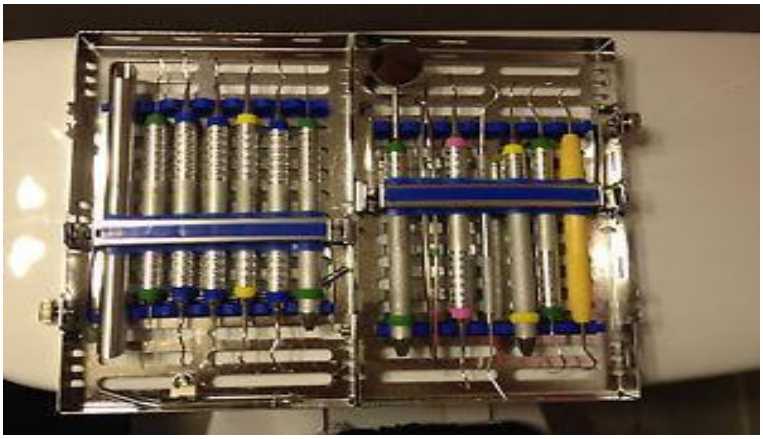
TECHNICAL SPECIFICATIONS		
Name	**Restorative Filling and Carving Instruments Set**	
		
1	Clinical purpose	Restorative Filling and Carving of teeth
2	Technical characteristics	-The instrument shall be free from burrs, pits, cracks and other surface defects; -Handle should have minimum 10mm length; -Should not cause corrosion or felting; - All instruments should be Autoclavable; -Made of medical grade stainless steel; - Plastic filling instrument – reverse double and medium size; -Burnisher – ball – 1.3 mm -2.1mm tip diameter; -Spoon Excavator – large tip diameter – 2.0mm-2.5mm; -Spoon Excavator – small tip diameter – 1.2mm-1.5mm; -Doudle ended Hollenback carver; -Double ended Condenser – Marquette – tip diameter – 1.00mm-1.4mm; -Placement Instrument (flat and ball end); -Cement Carrier - double ended 1.5mm-2mm; -Instruments should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning and sterilization of all surfaces, with no unreachable fluid traps.

4	Warranty	2 Years and a replacement guarantee in case of breakage

8. COMPOSITE FILLING INSTRUMENTS-FULL SET OF INSTRUMENTS

TECHNICAL SPECIFICATIONS		
Name	**Composite Filling Instruments-Full Set of instruments**	
		
1	Clinical purpose	For both anterior and Posterior Restoration.
2	Technical characteristics	-Products should include a wide range of spatulas ideally tailored for the purpose; -Polished, corrosion-resistant stainless steel tips prevent the adhesion of filling material so the treating professional can place it exactly where it is needed; -Should not cause corrosion or felting of the filling material; -Handle should have minimum 10mm length -All instruments should be Autoclavable; -Made of medical grade stainless steel; -Instruments should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning and sterilization of all surfaces, with no unreachable fluid traps.
4	Warranty	2 Years and a replacement guarantee in case of breakage

9.HAND SCALER (COMPLETE SET)

TECHNICAL SPECIFICATIONS		
Name	**Hand scaler (complete set)**	
		
1	Clinical purpose	Used for the removal of calculus (and plaque) in the anterior and posterior regions of jaws.
2	Technical characteristics	-Suitable for removal of calculus up to a pocket depth of 3 mm; -Extra light and "handy" ensures a more fatigue-free working; -Thick non-slip handle with minimum 10mm length; -Proprietary heat treated and cryogenic processed stainless steel alloy working tips are super-durable; -Made of medical grade stainless steel; -all instruments should be Autoclavable; -Instruments should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning and sterilization of all surfaces, with no unreachable fluid traps.
4	Warranty	2 Years and a replacement guarantee in case of breakage

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10.MOUTH MIRRORS

TECHNICAL SPECIFICATIONS		
Name	**Mouth Mirrors**	
		
1	Clinical purpose	For allowing indirect vision by the dentist, reflecting light onto desired surfaces, and retraction of soft tissues.
2	Technical characteristics	-Reusable mouth mirror, common mirror; -Mirror should be detachable from the mirror handle and diameter 24mm; -Thick non-slip handle with minimum 10mm length; -Extra light and "handy" ensures a more fatigue-free working; -Medical Grade Stainless steel; -Instrument should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

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11.STRAIGHT PROBES

TECHNICAL SPECIFICATIONS		
Name	**Straight Probes**	
		
1	Clinical purpose	For exploring Carious teeth
2	Technical characteristics	-Extra light and "handy" ensures a more fatigue-free working; -Should have a firm grip; -Thick non-slip handle with minimum 10mm length; -Made of medical grade stainless steel; -Instrument should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 years and replacement guarantee in case of breakage;

12.EXPLORERS

TECHNICAL SPECIFICATIONS	
Name	**Explorers**

``

		
1	Clinical purpose	For exploring Carious teeth
2	Technical characteristics	-Explorers 12mm length and Shepherd's hook; -Should be double ended; -Extra light and "handy" ensures a more fatigue-free working; -Thick non-slip handle and firm grip; -Made of medical grade stainless steel; -Instrument should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 years and replacement guarantee in case of breakage;

13.DENTAL TWEEZERS

TECHNICAL SPECIFICATIONS		
Name	**Dental Tweezers**	
		
1	Clinical purpose	For picking up small objects like cotton rolls

2	Technical characteristics	-Type: Angled; -Should be non-locking; -Should have a firm grip; -Length: range between 15cm and 18cm; -Material: Medical Grade Stainless steel; - Instruments should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 years and a replacement guarantee in case of breakage;

14.CHEATLE FORCEPS

TECHNICAL SPECIFICATIONS		
Name	**Cheatle forceps**	
		
1	Clinical purpose	To take sterile instrument, for placing or removing items
2	Technical characteristics	-Should be reusable; -Medical Grade Stainless steel; -Should be Handy; -Light weight and Convenient to use; -Should be 10'' length; -Instruments should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable

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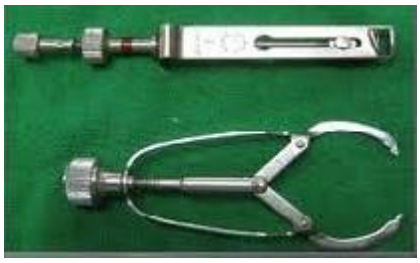
4	Warranty	3 Years

15.KIDNEY TRAY

TECHNICAL SPECIFICATIONS		
Name	**Kidney tray**	
		
1	Clinical purpose	A kidney dish is a shallow basin with a kidney-shaped footprint and sloping walls (hence its alternate name) used in medical and surgical wards to receive soiled dressings and other medical waste.
2	Technical characteristics	-Should be reusable and Autoclavable; -Should be medical grade stainless steel; -Size should be 8” length -Rust free, Light weight and Convenient to use; - Instruments should be CE (Europe)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

16. MATRIX BAND AND RETAINER (BOTH NO. 1& 8)

TECHNICAL SPECIFICATIONS		
Name	**Matrix Band and retainer (both no. 1& 8)**	
		
1	Clinical purpose	To secure the ends of a matrix band around a tooth during filling
2	Technical characteristics	-Retainer should be No1 & 8; -Retainer should be reusable; -All matrix band should be non contoured; -Matrix band compatible with retainer no 1 should be inserted easily. -Matrix band compatible with retainer no 8 should be inserted easily. - Matrix band should be sufficiently rigid to retain the contour, should not adhere or react with restorative material, should resist the condensation pressure, and should be easy to remove. -Both retainer and matrix band should be made of Medical Grade Stainless steel. -Light weight and Convenient to use. -Retainer and matrix band should be CE(EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Retainer should be Autoclavable

TECHNICAL SPECIFICATIONS		
4	Warranty	3 years and a replacement guarantee in case of breakage;

17.DENTAL IMPRESSION TRAYS

TECHNICAL SPECIFICATIONS		
Name	**Dental Impression Trays**	
		
1	Clinical purpose	To hold the impression material as it sets and supports the set impression.
2	Technical characteristics	-Both perforated -Perforated full denture set should have 8 impression trays (1 set of upper impression tray-U0,U1,U2 & U3 and 1 set lower impression tray-L0, L1, L2 & L3); -Medical Grade Stainless steel; -Should be Handy and convenient to use; -Should be CE (EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 years and a replacement guarantee in case of breakage;

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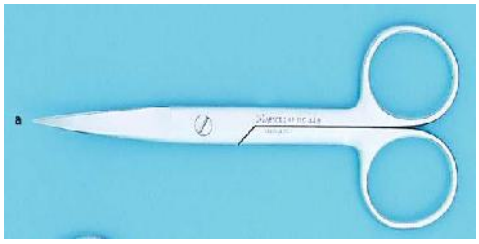
18.DENTAL MALLET

TECHNICAL SPECIFICATIONS		
Name	**Dental mallet**	
		
1	Technical characteristics	-Handle length should be minimum 10mm; -Head diameter should have maximum 22mm; -Thick non-slip handles; -Made of medical grade stainless steel;
2	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
3	Warranty	3 years and a replacement guarantee in case of breakage;

19. SCISSORS

TECHNICAL SPECIFICATIONS		
Name	**Scissors**	
		
1	Clinical purpose	For suture cutting

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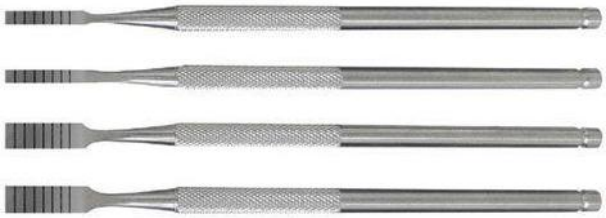
2	Technical characteristics	-Should be reusable; -Should be corrosion rust free; -Thick non-slip handles; -Should be 5’’-6’’ size straight; - Should be CE (EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

20. NEEDLE HOLDER

TECHNICAL SPECIFICATIONS		
Name	**Needle holder**	
		
1	Clinical purpose	To hold a suturing needle for closing wounds during suturing and surgical procedures.
2	Technical characteristics	-Should be reusable; -Thick non-slip handles; -Should be corrosion resistant rust free; -Made of medical grade stainless steel; -Should have 6”- 8” size; Should be CE (EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

21. BONE CHISEL (MONO BEVEL)

TECHNICAL SPECIFICATIONS		
Name	**Bone Chisel (mono bevel)**	
		
1	Clinical purpose	To shave bone during extraction/surgery
2	Technical characteristics	-Should have 4mm blade and 16mm straight length of instrument. -Should be reusable; -Thick non-slip handles and corrosion resistant rust free; -Made of medical grade stainless steel; - Should be CE (EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

22. SCALPEL HANDLE

TECHNICAL SPECIFICATIONS	
Name	**Scalpel handle**

		
1	Clinical purpose	To receive surgical blades during surgeries
2	Technical characteristics	-Bard Parker style with metric rule (No 03), finely balanced, pen-like scalpel handle that easily rotates and maneuvers in difficult to reach areas with fingertip control. -Metal, sterilizable handle for replaceable blades; -Thick non-slip handles and corrosion resistant rust free; -Made of medical grade stainless steel. Should be CE (EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

23.DRUM

TECHNICAL SPECIFICATIONS	
Name	**Drum**

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1	Clinical purpose	Dental, Medical Gauze And Sterilizing purpose
2	Technical characteristics	-Should be reusable; -Thick non-slip handles; -Made of medical grade stainless steel -Should have 2 different type (including perforated) minimum 6inches height and 9inches diameter; -Locking facility should available; Should be CE (EU)/ISO certified or FDA (US) certified;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be Autoclavable
4	Warranty	3 Years

24. PLASTER SPATULA (STRAIGHT AND CURVED)

TECHNICAL SPECIFICATIONS	
Name	**Plaster Spatula (Straight and Curved)**

1	Clinical purpose	For mixing dental plaster/ stone /alginate etc
2	Technical characteristics	-Should be straight and curved on the edge (1Each); -Should have stainless steel blade with wooden handle; -Blade should be rounded on the both the end;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	1 Years

25. RUBBER BOWLS

TECHNICAL SPECIFICATIONS		
Name	**Rubber Bowls**	
		
1	Clinical purpose	For mixing dental plaster/ stone /alginate etc
2	Technical characteristics	-Rubber made, easy to clean; -Should have minimum 2 different sizes (Small and medium);
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	1 Years

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26. SUCTION TIPS

TECHNICAL SPECIFICATIONS		
Name	**Suction tips**	
		
1	Clinical purpose	Suck out saliva/ water during examination and dental procedures
3	Technical characteristics	-Should be detachable; -Should be Stainless Steel and 2 Nos;
5	User's care, Cleaning, Disinfection & Sterility issues	Should be autoclavable
6	Warranty	1 Years

27. CHEEK RETRACTORS

TECHNICAL SPECIFICATIONS		
Name	**Cheek Retractors**	
		
1	Clinical purpose	Retracts the lips and cheeks for optimal buccal and gingival access, maximum visibility and patient comfort;
2	Technical characteristics	-Suitable for use in diagnostic, preventive and therapeutic dental application; -Should be reusable and latex free material; -Should have both one adult and one pediatric sizes; -Should be self retaining; -Material should be flexible, which make patients very comfortable; -Cheek retractor made of durable clear plastic for increased visibility;
3	User's care, Cleaning, Disinfection & Sterility issues	Should be autoclavable
4	Warranty	1 Years

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28.MOUTH PROPS (ADULT + PEDO) WITH CHAIN

TECHNICAL SPECIFICATIONS		
Name	**Mouth Props (Adult + Pedo) with chain**	
		
1	Clinical purpose	To keep mouths open wide and steady during a procedure
2	Technical characteristics	-Small Child Latex-Free; -Adult Latex-Free; -Should be reusable plastic material; -Should have both adult and pediatric sizes; -Should be without sharp edges;
3	User's care, Cleaning, Disinfection & Sterility issues	Sterilizable and cleanable using alcohol and other chemical reagents.
4	Warranty	1 Years

29. CEMENT SPATULA (PLASTIC AND METAL)

TECHNICAL SPECIFICATIONS		
Name	**Cement Spatula (plastic and metal)**	
 		
1	Clinical purpose	For mixing, cements and pastes
2	Technical characteristics	- Plastic made spatula – 1 No; -Double-ended stainless steel made spatula with length 44 mm – 1 no; -Should be handy, light weight and convenient to use; -Should be flat blade from one side, arch headed on another; -Handle length should be minimum 10mm;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	1 Years

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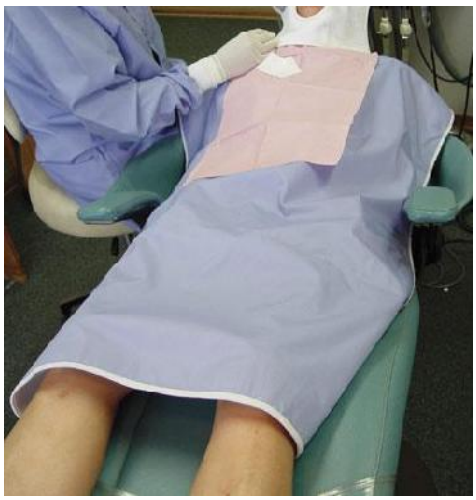
30. PATIENT DRAPE

TECHNICAL SPECIFICATIONS		
Name	**Patient drape**	
		
1	Clinical purpose	To prevent body of the patient against contact from caustic liquids, splashing water, flying debris during treatment
2	Technical characteristics	-Should made of reusable plastic material;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.

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31. GLASS DAPPEN DISH

TECHNICAL SPECIFICATIONS		
Name	**Glass Dappen dish**	
		
1	Clinical purpose	For mixing dental medicaments or fillings
2	Technical characteristics	-Should be made of glass; -Should be reusable;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.

32.MORTAR AND PESTLE

TECHNICAL SPECIFICATIONS		
Name	**Mortar And pestle**	
		
1	Clinical purpose	For making silver filling by mixing powder and liquid
2	Technical characteristics	-Should be reusable; -Thick non-slip mortar surface and pestle handle; -Should be made of glass;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.

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35 .LEAD APRON AND THYROID GUARD

TECHNICAL SPECIFICATIONS		
Name	**Lead apron and thyroid guard**	
		
1	Clinical purpose	To protect from x-ray radiation
2	Technical characteristics	-Should be AERB approved. - Should be 0.5mm lead equivalent. - Should be hook and loop type (Velcro fitting). - Should be supplied along with thyroid guard.
3	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	-Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
4	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
5	Warranty	3 Years

36. GLASS SLAB

Glass Slab	Retail Value > 19 USD. 100% brand new, made of high quality stainless steel. Convenient for mixing medicine, glue, glass ionomer cement and so on. Perfect tools specially designed for Dental Lab Work. Size: 15cm x 10cm

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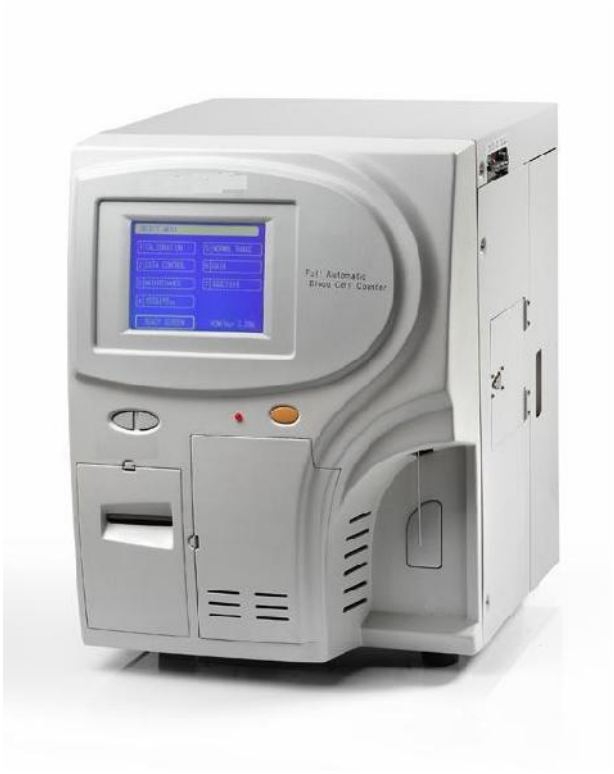
E. LABORATORY EQUIPMENTS

1. AUTOMATED BLOOD CELL COUNTER

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)
Automated Blood Cell Counter 

NAME AND CODING		
GMDN		**Automated Blood Cell Counter**

GENERAL USE		
1		
1.1	Clinical purpose	The instrument measures the type of blood cell by analyzing data about the size and aspects of light as they pass through the cells (called front and side scatter).
1.2	Used by clinical department/ward	Hospital, Blood Bank, Clinical Laboratory

TECHNICAL		
2	**TECHNICAL CHARACTERISTICS**	
2.1	Technical characteristics (specific to this type of device)	1) Should have in-built thermal printer with software compatibility for external computer/LAN and printer. 2) Should have extended linearity(preferably upto 25g/dl for HGB, 1 lac/Cubic mm for RBC and 10 Lac/Cubic mm for platelets. 3) Number of reportable parameters: a minimum of 18 parameters 4) Essential reportable parameters in whole blood:Hemoglobin(HGB);Hematocrit(HCT);RBC,MCV,MCH,M CHC,RDW-SD,RDW-CV;WBC #,Granulocytes(Neutrophils)#,Granulocytes(Neutrophils)% of WBC; Lymphocyte % of WBC; Mixed (Eosinophils, Monocytes, Basophils and others)#; Mixed(Eosinophils, Monocytes, Basophils and others)%; Platelets(PLT);MPV;PDW 5)Sample: Both whole blood and pre-diluted mode 6)Throughput: Minimum of 50 samples/hour 7)Principle: Electrical Impedance method 8)Minimum of three histograms-RBC,WBC and PLT should be displayed 9)Memory: Minimum of 200 results memory
2.2	User's Interface	Manual with a provision for keyboard attachment
2.3	Software and/or standard of communicatio	Applicable software to be supplied

	n(where ever required)	
3	**PHYSICAL CHARACTERISTICS**	
3.1	Dimensions (metric)	NA
3.2	Weight (lbs, kg)	NA
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, Portability	Movable
4	**ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)**	
4.1	Power Requirements	Recharging UPS unit: Input voltage- 220VAC ± 10%, 50 Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	± 10%
4.4	Protection	Should have online UPS and over-charging cut-off with visual symbol.
4.5	Power consumption	NA
5	**ACCESSORIES, SPARE PARTS, CONSUMABLES**	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	1)Quality controls facility with the availability of controls with each set of reagents; 2)Alerts for operator for level of reagents and to empty waste when indicated; 3)Reagent expiry time should be minimum of 1 year; 4)One set of all reagent and controls at the time of delivery; 5)Two sets of all tubings; 6)Staged supply of controls over 1 year from the date of installation; 7)Cost of reagents, control & calibration for price to be declared involve cost/cycle for 3 years;
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	**ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATIONS**	

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6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 5 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2)Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	**STANDARDS AND SAFETY**	
7.1	Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	1)Instrument should be CE (EU) marked or USFDA approved; 2)Should have IEC 61010-1, IEC 61010-2-101:2002;
7.2	Local and/or International	Manufacturer / supplier should have ISO 13485 certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5Amps/ 15Amps socket; 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the Manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;

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10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying Documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/add-hoc) to be declared by the manufacturer;
11.2	Recommendations or Warnings	Any warning signs would be adequately displayed

2. MICROSCOPE

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Microscope		
		
NAME AND CODING		
GMDN name		Basic Light Microscope
GENERAL USE		
1		

1.1	Clinical purpose	Microscopic analysis of blood cells helps diagnose infections and allergies, leukemias, anemia, and other blood disorders. Microscopic examinations can detect abnormal changes in cells or tissues to differentiate benign, inflammatory, precancerous, or malignant conditions.
1.2	Used by clinical department/ward	Clinical or research laboratory; physician office; clinic; hospital
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	Technical characteristics (specific to this type of device)	1)Binocular microscope, Eye piece lenses x10,x15 2)Objectives x4,x10,x40,x100 3)Operated with transmitted light from bulb 4)Including condenser Include two extra bulbs, graticule to be fixed on eyepiece 5)Stage micrometer 230V 50-60 Hz
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	NA
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	[380-450] x [203-820] x [305-380]
3.2	Weight (lbs, kg)	Max: 10 Kg
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	Handheld device
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Recharging unit: Input voltage- 220-240VAC ± 10%, 50/60 Hz

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4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	± 10%,
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed	NA Should be providing dust cover and immersion oil.
	system)	
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	STANDARDS AND SAFETY	
7.1	Certificates (pre- market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	1)Should have IEC 61010-1 certificate; 2)Instrument should be CE (EU) marked or USFDA approved;
7.2	Local and/or international	Manufacturer / supplier should have ISO 13485 certificate for quality standard.
8	TRAINING AND INSTALLATION	

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8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket; 2)Safety and operation check before handover; 3)Line Power
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Biomedical engineering staff and/or service contract with the manufacturer or third-party organization; OEM servicers. Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/ad-hoc) to be declared by the manufacturer;

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11.2	Recommendations or warnings	Any warning signs would be adequately displayed

3. SEMI-AUTOMATED ANALYZER

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Semi-automated analyzer		
		
NAME AND CODING		
GMDN name		Laboratory , clinical , semi- automated Biochemistry Analyser
GENERAL		
1	USE	
1.1	Clinical purpose	An automated analyzer is a medical laboratory instrument designed to measure different chemicals and other characteristics in a number of biological samples quickly, with minimal human assistance.
1.2	Used by clinical department/ward	Hospital; clinic; physician office; clinical laboratory

TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	Technical characteristics (specific to this type of device)	**System Information:** System Type : Semi Automatic Throughput : 120 Tests/Hour Type of Tests : Routine & Un common Biochemistry Enzymes, Substrates, Drug Assays, Serum Proteins Analysis Mode : End Point, Fixed Time, Kinetic, Linear/Non-Linear Multipoint Calibration Programming : Open System for user Defined Profiles and calculations **Optical System:** Filters : Interference Filters Absorbance Range : 0.000 to 2.500 Abs. Unit **Reagent System:** Open **Sample System:** **Reaction System:** Cuvettes Reaction Temperature is 37°C, Controlled
		Wash Station: **Mixing Station:** **Calibration & Control:** Quality Control by Levey Jennings / Westgard Rules
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	Windows based user friendly operation (not mandatory) Online status of reagent, sample and reaction system
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	NA
3.2	Weight (lbs, kg)	NA
3.3	Configuration	NA
3.4	Noise (in dBA)	NA

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3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	
4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Recharging unit: Input voltage- 220VAC ± 10%, 50-60Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	± 10%
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	NA
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open system)	UPS-0.5KVA online, Micro-pipettes, Tips for pipettes and Required reagents
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATIONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	STANDARDS AND SAFETY	

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7.1	Certificates (pre- market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	1)Should have IEC 61010-1 certificate; 2)Instrument should be CE (EU) marked or USFDA approved;
7.2	Local and/or international	Manufacturer / supplier should have ISO 13485 certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1) Availability of 5 amp socket; (Type D). 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;

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10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/add-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

4. DIGITAL HAEMOGLOBINOMETER (WITH CUVIC AND LANCET)

MEDICAL DEVICE SPECIFICATION (Including Information on the following where relevant/appropriate, but not limited to)		
Digital Haemoglobinometer (with cuvic and lancet)		
 NAME AND CODING		
GMDN name		Digital Haemoglobinometer
GMDN code		
GENERAL		
1	USE	

1.1	Clinical purpose	A Haemoglobinometer is an instrument used to determine the hemoglobin content of the blood by spectrophotometric measurement. Portable haemoglobinometers provide easy and convenient measurement, which is particularly useful in areas where no clinical laboratories are available. It is also useful in emergencies due to its ease-of-use, accuracy, and fast delivery of results.
1.2	Used by clinical department/ward	Hospital, blood bank, clinical Laboratory
TECHNICAL		
2	TECHNICAL CHARACTERISTICS	
2.1	Technical characteristics (specific to this type of device)	1)Should have testing time of not more than 5 seconds 2)Sample volume should not be more than 20µL 3)Range of measurement should be between 0 to 25g/dl 4)Output: On-board screen display screen, printer(optional) 5)Should be able to withstand outdoor environmental conditions
2.2	User's interface	Manual
2.3	Software and/or standard of communication(where ever required)	NA
3	PHYSICAL CHARACTERISTICS	
3.1	Dimensions (metric)	NA
3.2	Weight (lbs, kg)	Max: 250 g (excluding battery)
3.3	Configuration	NA
3.4	Noise (in dBA)	NA
3.5	Heat dissipation	Heat Dissipation: Should maintain nominal Temp and the heat should be disbursed through an cooling mechanism
3.6	Mobility, portability	Handheld device

4	ENERGY SOURCE (electricity, UPS, solar, gas, water, CO2 ....)	
4.1	Power Requirements	Recharging unit: Input voltage- 220VAC ± 10%, 50 Hz
4.2	Battery operated	Yes
4.3	Tolerance (to variations, shutdowns)	± 10%
4.4	Protection	Should have over-charging cut-off with visual symbol.
4.5	Power consumption	Internal batteries(should be easily
		available in market)
5	ACCESSORIES, SPARE PARTS, CONSUMABLES	
5.1	Accessories (mandatory, standard, optional); Spare parts (main ones); Consumables / reagents (open, closed system)	1)Cuvette supply should be accompanied by equal supply of Disposable Lancets and swab in equal numbers and not to exceed Rs.30/unit 2)1x10 cells 3)1x50 cuvettes extra for calibration/checking purposes
BIDDING / PROCUREMENT TERMS / DONATION REQUIREMENTS		
6	ENVIRONMENTAL AND DEPARTMENTAL CONSIDERATONS	
6.1	Atmosphere / Ambiance (air conditioning, humidity, dust ...)	1)Operating condition: Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% in ideal circumstances. 2) Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 to 90%.
6.2	User's care, Cleaning, Disinfection & Sterility issues	Capable of cleaning with alcohol or chlorine wipes
7	STANDARDS AND SAFETY	
7.1	Certificates (pre-market, sanitary, ..); Performance and safety standards (specific to the device type);Local and/or international	1)Should have IEC 61010-1 certificate; 2)Instrument should be CE (EU) marked or USFDA approved;

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7.2	Local and/or international	Manufacturer / supplier should have ISO 13485 certificate for quality standard.
8	TRAINING AND INSTALLATION	
8.1	Pre-installation requirements: nature, values, quality, tolerance	1)Availability of 5 amp socket; 2)Safety and operation check before handover;
8.2	Requirements for sign-off	Certificate of calibration and inspection from the manufacturer/factory
8.3	Training of staff (medical, paramedical, technicians)	1)Training of users on operation and basic maintenance; 2)Advanced maintenance tasks required shall be documented
9	WARRANTY AND MAINTENANCE	
9.1	Warranty	3 years
9.2	Maintenance tasks	1)Maintenance manual detailing; 2)Complete maintenance schedule;
9.3	Service contract clauses, including prices	The spare price list of all spares and accessories (including minor) required for maintenance and repairs in future after guarantee / warranty period should be attached;
10	DOCUMENTATION	
10.1	Operating manuals, service manuals, other manuals	Should provide 2 sets(hardcopy) of:- 1)User, technical and maintenance manuals to be supplied along with machine diagrams; 2)List of equipment and procedures required for local calibration and routine maintenance; 3)Certificate of calibration and inspection;
10.2	Other accompanying documents	List of important spares and accessories, with their part numbers and cost;
11	NOTES	
11.1	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/add-hoc) to be declared by the manufacturer;
11.2	Recommendations or warnings	Any warning signs would be adequately displayed

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F. PSYCHOLOGICAL TOOLS

1. RECEPTIVE-EXPRESSIVE EMERGENT LANGUAGE TEST—THIRD EDITION (REEL-3)

TECHNICAL SPECIFICATIONS		
Name	**Receptive-Expressive Emergent Language Test**	
		
1	Clinical purpose	The REEL-3 uses the behavioral observations of parents or guardians to identify major language problems in youngsters up to 3 years of age.
2	Technical characteristics	-Should have paper based forms; -Should consists of two core subtests--Receptive Language and Expressive Language (3rd edition);

2. LINGUISTIC PROFILE TEST (LPT)

TECHNICAL SPECIFICATIONS		
Name	**Linguistic Profile Test (LPT)**	
1	Clinical purpose	For evaluation as well as a basis for rehabilitation and linguistic retraining of the communicatively disabled
2	Technical characteristics	-Should have paper based forms; -Forms should have focused on the collection of normative data for school going children from Grade 1 to Grade V for the LPT; -Forms should be suitable for collecting data for children ranging in age from 6+ years to 10+; -Form should be compatible with 30 subjects in each age group; -Forms should include Mean and Standard deviation of LPT scores. Mean and standard deviations of each of the three sections (Phonology, Syntax and Semantics) of LPT should also mention; -Forms should have normative data, which would be useful in identifying children with language disorders at particular linguistic levels and also as a baseline for speech-language therapy;

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3. DEVELOPMENTAL ASSESSMENT SCALES FOR INDIAN INFANT (DASII)

TECHNICAL SPECIFICATIONS		
Name	**Developmental Assessment scales for Indian infant (DASII)**	
		
1	Clinical purpose	Motor items tests loco motor skill, manipulatory behavior and supine to erect posture. Mental scale scores cognizance, perceptual pursuit, exploration, communication and language comprehension, manual dexterity, spatial relationship, social interaction, and imitative behavior.
2	Technical characteristics	-For Age group: 0-30 months; -The scales should consist of 67 items for motor and 163 items for development, total no. of items: 230;

4. VINELAND SOCIAL MATURITY SCALE

TECHNICAL SPECIFICATIONS		
Name	**Vineland Social Maturity Scale**	
1	Clinical purpose	Measures social competence, self-help skills, and adaptive behavior from infancy to adulthood. It is used in planning for therapy and/or individualized instruction for persons with mental retardation or emotional disorders.
2	Technical characteristics	-Should consist of a 117data field interview format for parent or other primary caregiver. The test should consists of 8 sub-scales measuring: • Communication skills • General self-help ability • Locomotion skills • Occupation skills • Self-direction • Self-help eating • Self-help dressing • Socialization skills; -Should have paper based;

5. VINELAND ADAPTIVE BEHAVIOR SCALES

TECHNICAL SPECIFICATIONS	
Name	**Vineland Adaptive Behavior Scales**

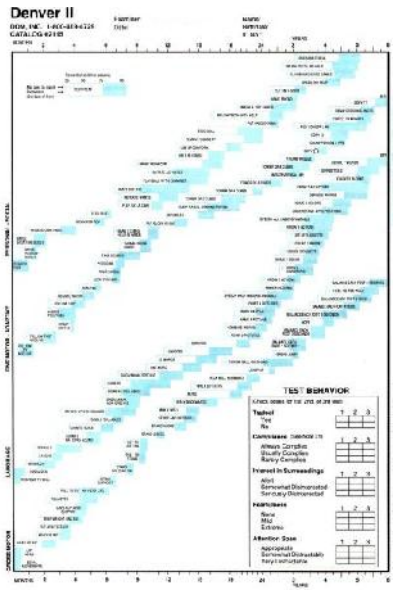
		
1	Clinical purpose	To measure adaptive behavior of individuals from birth to age 90. Development evaluations. Clinical Diagnosis of autism spectrum disorder, Genetic disorder Developmental.
2	Technical characteristics	-The Vineland-II contains 5 domains each with 2-3 sub domains; -The main domains are: Communication, Daily Living Skills, Socialization, Motor Skills, and Maladaptive Behavior (optional). The domain scores yield an adaptive behavior composite; -Should have paper based;

6. DEVELOPMENTAL SCREENING TEST (DST)

TECHNICAL SPECIFICATIONS	
Name	**Developmental Screening Test (DST)**
	

1	Clinical purpose	Task performing activity
2	Technical characteristics	-Bharat Raj DST; -The scale reflects what percentage of a certain age group is able to perform a certain task; -Should have paper based forms; -Booklet should be made of HDPE [high density polyethylene] or any other non-tear water proof material; -Booklet should have durable spiral binding;

7. DENVER SCALE II- DEVELOPMENTAL SCREENING TEST II

TECHNICAL SPECIFICATIONS		
Name	**Denver Scale II- Developmental Screening Test II**	
		
1	Clinical purpose	The DENVER II is a revision and update of the Denver Developmental Screening Test, DDST. Both were designed for use by the clinician, teacher, or other early childhood professional to monitor the development of infants and preschool-aged children.

TECHNICAL SPECIFICATIONS		
2	Technical characteristics	-Used to monitor children at risk for developmental problems; -125 performances based and parent report items are used to screen children's development in four areas of functioning: fine motor-adaptive, gross motor, personal social, and language skills; -Age range 1 month to 6 years of age; -Time 10 to 20 minutes; -Should have paper based forms;

8. STANFORD BINET (INDIAN ADAPTATION)

TECHNICAL SPECIFICATIONS		
Name	**Stanford Binet (Indian adaptation)**	
		
1	Clinical purpose	-Age equivalent test to measures general mental ability i.e. intelligence -Binet-Kamat Scale of intelligence is the Indian adaptation of the 1934 version of Stanford-Binet Scale of Intelligence
2	Technical characteristics	Age group: 2 years to 22 years Administration time:50-60 minutes

9. *BAYLEY-III SCREENING TEST COMPLETE KIT INCLUDING MANUAL, STIMULATION BOOK, PICTURE BOOK, RECORD FORMS 25 PACKS

TECHNICAL SPECIFICATIONS		
Name	**BAYLEY-III Screening Test**	
		
1	Clinical purpose	To determine if a child is "on track" developmentally or if further, more comprehensive assessment is needed.
2	Technical characteristics	-Age Range: 1 month to 42 months; -Should have administration time: 10 to 20 minutes; -Should have administration type: Individual; -Should be able to assess cognitive, language and motor development, fast and easy administration using selected items from full Bayley-III battery Child-friendly with playful activities, cut scores according to age.

10. PIAGETS SENSORI-MOTOR INTELLIGENCE SCALE 0-2 YEARS • PIAGETIAN COGNITIVE TASKS

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11. DYSLEXIA EARLY SCREENING TEST 4-6 YEARS (DEST) AND DYSLEXIA SCREENING TEST JUNIOR (6-11 YEARS)

TECHNICAL SPECIFICATIONS		
Name	**Dyslexia Early Screening Test 4-6 years (DEST) and Dyslexia Screening Test Junior (6-11 years)**	
		
1	Clinical purpose	Screening tests of attainment and ability to determine whether a young child is experiencing difficulty in areas known to be affected in dyslexia.
	Technical characteristics	Dyslexia Early Screening Test - Second Edition (DEST-2) for 4-6years should include 12 subtests: Rapid naming, Bead threading, Phonological discrimination, Postural stability, Rhyme/Alliteration, Forwards digit span, Digit naming, Letter naming, Sound order, Shape copying, Corsi frog Vocabulary (group/individual). Dyslexia Screening Test - Junior (DST-J) is for 6-11 years and should consists of the following subtests: Rapid Naming Bead Threading One Minute Reading Postural Stability Phonemic Segmentation Two Minute Spelling Backwards Digit Span Nonsense Passage Reading One Minute Writing Verbal Fluency Rhyme NEW Vocabulary NEW

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12. NIMHANS BATTERY

TECHNICAL SPECIFICATIONS		
Name	**NIMHANS battery**	
1	Clinical purpose	For Tests of Speed, Attention, Memory, Executive Function, Comprehension
2	Technical characteristics	Should include Finger tapping Test Digit Symbol Substitution Test Colour Trails Test Digit Vigilance Test Triads Test Auditory Verbal Learning Test Logical Memory Test Complex Figure Test Design Learning Test Controlled Word Association Test Animal Names Test Design Fluency Test N Back tests (Verbal & Visual) Self-Ordered Pointing Tests Tower of London Test Wisconsin Card Sorting Test Stroop Test Token test. Should be used for 6-9 years.

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G SENSORY INTEGRATION EQUIPMENTS

1. PINSPOT AND MIRROR BALL BUNDLE

TECHNICAL SPECIFICATIONS		
Name	**Pinspot and Mirror Ball Bundle**	
		
1	Clinical purpose	Shine the pin-spot onto the mirror ball to create hundreds of mirrored reflections around the room.
2	Technical characteristics	-Mains powered motor to spin mirror balls or other light hanging items; -Fixed 2 RPM rotational speed; -Designed to use power from a lighting circuit; -Load limit of 4kg at mirror ball motor; -Shaft with pre-drilled hole for mirror ball connection; -Should operate on 220VAC/50Hz; -Should be provided with 20cm ball and 15cm chain; -Pinspot should have 4 different color wheel;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	3 Years
5	Documentation	-User, technical and maintenance manuals to be supplied along with machine diagrams; -Contact details of manufacturer, supplier and local service agent to be provided

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2. MIRROR BALL MOTOR

TECHNICAL SPECIFICATIONS		
Name	**Mirror Ball Motor**	
		
1	Clinical purpose	This ceiling-mounting box contains a motor that will rotate mirror ball at a stately 2 RPM. Fitted with 1m (approx) mains lead and plug.
2	Technical characteristics	-Mains powered motor to spin mirror balls or other light hanging items; -Fixed 2 RPM rotational speed; -Designed to use power from a lighting circuit; -Load limit of 4kg; -Shaft with pre-drilled hole for mirror ball connection; -Should operate at 220VAC/50Hz;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	3 Years
5	Documentation	-User, technical and maintenance manuals to be supplied along with machine diagrams; -Contact details of manufacturer, supplier and local service agent to be provided;

3. LED MIRROR BALL

TECHNICAL SPECIFICATIONS		
Name	**LED Mirror Ball**	
		
1	Clinical purpose	LED Mirror Ball features a 6inches diameter ball covered with crack-resistant mirror tiles, a battery/mains-operated rotating motor with a silver chain, and multi-colored LED lights mounted in the motor.
2	Technical characteristics	-6inches diameter disco mirror ball; -Rotating motor with LED lights; -Attached silver chain and ring; -On/off switch and sound activation;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	3 Years
5	Documentation	-User, technical and maintenance manuals to be supplied along with machine diagrams; -Contact details of manufacturer, supplier and local service agent to be provided;

4. FIRE BALL -MOUNTED ON THE ROOF

TECHNICAL SPECIFICATIONS		
Name	**Fire ball -mounted on the roof**	
		
1	Clinical purpose	This classic light effect fires narrow beams of light around the room as it rotates.
2	Technical characteristics	-Should have wide coverage; -Perfect for ceiling or desk mounting; -Should have 100,000 hours LED life span (approx); -Should operate at 220VAC/50Hz; -Should have min 4 revolutions per minute; -Should have max. weight: 2kg;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	3 Years
5	Documentation	-User, technical and maintenance manuals to be supplied along with machine diagrams; -Contact details of manufacturer, supplier and local service agent to be provided;

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5. SOUND ACTIVATED LIGHT

TECHNICAL SPECIFICATIONS		
Name	**Sound Activated Light**	
		
1	Clinical purpose	This classic light effect multicolor light around the room.
2	Technical characteristics	-Should have sound activation system inbuilt; -Fully Automatic LED Compact Border; -Cycle Light for Indoor Use; -Lightweight; -Adjusting speed and sound sensitivity; -Should have low power consumption; -Should operated at 220VAC/50Hz; -Should have 100,000 hours LED life span (approx);
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	3 Years
5	Documentation	-User, technical and maintenance manuals to be supplied along with machine diagrams; -Contact details of manufacturer, supplier and local service agent to be provided;

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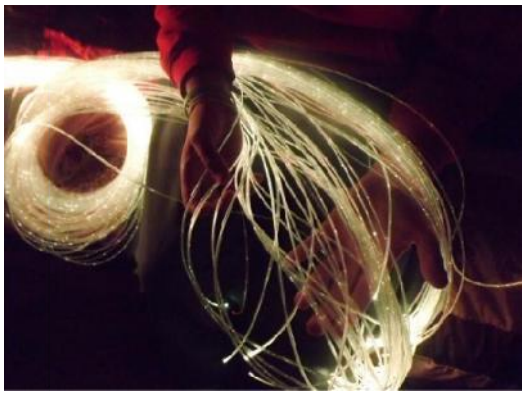
6. LED BUBBLE TUBE

TECHNICAL SPECIFICATIONS		
Name	**LED Bubble Tube**	
		
1	Clinical purpose	This light change in tube while touching around the light.
2	Technical characteristics	-Adjusting speed and sound sensitivity; -Should have low power consumption; -Should operated at 220VAC/50Hz; -Tubes should made of thick acrylic plastic, not glass; -The LED light of Bubble tube should slowly change color whilst small bubbles rise continuously; -Should have min. 10,000 hours LED life span (approx); -Minimum Dimensions: 75mm diameter x 500mm height; -Bubble tube with a vibrator and Led light which changes colors with mirror on two sides; -Should have low power consumption; -Should operated at 220VAC/50Hz;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit could be cleaned using alcohol based cleaning agents.
4	Warranty	3 Years
5	Documentation	-Technical manual to be provided

7. OPTIC FIBERS

TECHNICAL SPECIFICATIONS		
Name	**OPTIC fibers**	
		
1	Clinical purpose	Fibre optics with transparent light .
2	Technical characteristics	Should have flexible fibre optic with PVC covered; -Cable does not get hot (there is no current or heat through cable); -Should have ability of changing colors with remote control; -Perfect for sensory rooms, schools, hospitals, care homes; -30 x PVC covered side glow fibre (tripplefibre) optic 3.2 mm; -Should have low power consumption; -Should operated at 220VAC/50Hz; -Should have min. 10,000 hours LED life span (approx);
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	3 Years
5	Documentation	-Technical manual to be provided

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8. BLUE LED LIGHTS

TECHNICAL SPECIFICATIONS		
Name	**Blue LED Lights**	
1	Clinical purpose	To provide blue light in room.
2	Technical characteristics	-Should have blue LED light -Bulb type: replaceable blue LED -Should have sensory technology -Should have low power consumption; -Should operated at 220VAC/50Hz; -Should have min. 10,000 hours LED life span (approx);
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	3 Years
5	Documentation	-Technical manual to be provided

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9. BLUE LED LIGHT CHAIN

TECHNICAL SPECIFICATIONS		
Name	**Blue LED light chain**	
		
1	Clinical purpose	Chain of light, which provide blue color light.
2	Technical characteristics	-Should have 150 bulb blue LED light chain; -Bulb type: replaceable blue LED; -Should have low power consumption; -Should operated at 220VAC/50Hz; -Should have min. 10,000 hours LED life span (approx);
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	3 Years
5	Documentation	-Technical manual to be provided

10. BUBBLE TUBE

TECHNICAL SPECIFICATIONS		
Name	**Bubble Tube**	
		
1	Clinical purpose	Color Changing LED with lamp in water tube, floor standing lamp light
2	Technical characteristics	-Bubble tube lamp with silver base - Color changing LED lighting; -Supplied with 6 multi colored ; -Integrated controller for variable bubble stream; -Creates a calming, relaxing atmosphere - Ideal for homes, schools, sensory rooms, workplaces... and more; -Height : 900 mm (35.4 Inches); -Should have min. 10,000 hours LED life span (approx);
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	3 Years
5	Documentation	-Technical manual to be provided

11. ROTATING DRUM

TECHNICAL SPECIFICATIONS		
Name	**Rotating Drum**	
		
1	Clinical purpose	A large wooden slatter drum containing brightly coloured balls and bells.
2	Technical characteristics	Should have a wooden base to keep it stable; Should have a wooden slatted drum; Should have colored balls (min. of 10); Should have integral bells;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year

12.CHIME FRAME AND BEATER

TECHNICAL SPECIFICATIONS		
Name	**Chime Frame and Beater**	
		
1	Clinical purpose	Six colorful wooden chimes, suspended within a strong wooden frame
2	Technical characteristics	-Six colorful wooden chimes, suspended within a strong frame; -Complete with Beater attached; -Should have 370mmL x 270mmH in sizes;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year

13. MIRROR CHIME BOUT

TECHNICAL SPECIFICATIONS		
Name	**Mirror Chime bout**	
  		
1	Clinical purpose	Mirror Chime bout found in Child Development Centres, Nurseries and Special Schools worldwide.
2	Technical characteristics	-Should have a wooden stand with six extending arms each holding mirror/colorful strips and chime bells, which provide a stunning visual and auditory effect; -Should have strips of mirror Perspex faced, which respond to the slightest touch, making this a very visual toy; -Should have feature of mountable on a freestanding base. -Height :approx.24cm, Base diameter: approx. 20cm;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year

14. BOLSTER SWING

TECHNICAL SPECIFICATIONS		
Name	**Bolster swing**	
		
1	Clinical purpose	Bolster swings are a must for sensory integration therapy as they encourage righting reactions, adjustments to linear acceleration and motor planning.
2	Technical characteristics	-Should have vinyl-covered base on either side by simply flipping the bloster over; -Should have one side is high-density foam padding; the other side is padded with low-density foam; -Should have min. 4 feet in length and max. 2 feet in diameter; -Should have max load 180Kgs; -Should have heavy duty hanger with ball bearing technology up to 60 min continuous moving;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided.

PLATFORM SWING

TECHNICAL SPECIFICATIONS		
Name	**Platform swing**	
		
1	Clinical purpose	Platform swings are a must for sensory integration therapy as they encourage righting reactions, adjustments to linear acceleration and motor planning.
2	Technical characteristics	-Should have vinyl-covered base; -Should have one side is high-density foam padding; the other side is padded with low-density foam; -Should have min. 4 feet in length and max. 2 feet in width; -Should have max load 180Kgs; -Should have heavy duty hanger with ball bearing to support up to 60 min continuous swing;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided

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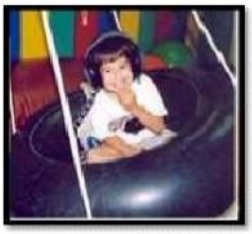
TYRE TUBE SWING

TECHNICAL SPECIFICATIONS		
Name	**Tyre tube swing**	
 		
1	Clinical purpose	Tyre tube swings are a must for sensory integration therapy as they encourage righting reactions, adjustments to linear acceleration and motor planning.
2	Technical characteristics	-Should have dual axis hanging feature; -Should provide inflating pump with measuring gauge; -Should have max load 180Kgs; -Should have heavy duty hanger with ball bearing to support up to 60 min continuous swing;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided

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ROPE LADDER SWING

TECHNICAL SPECIFICATIONS		
Name	**Rope ladder swing**	
		
1	Clinical purpose	Little acrobats can train their balance strength and power
2	Technical characteristics	-Should have a wooden bar that can be used as a seat or gymnastic bar -Should have sturdy synthetic rings which gives a strong hold to little hands while exercising and the synthetic rope can securely be affixed with the metal rings. -Should have max 200cm in length -Should have min. load capacity 60 kg -Should have heavy duty hanger with ball bearing to support up to 60 min continuous swing; -Age 3+
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided

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15. RHYTHMIC ROCKER

TECHNICAL SPECIFICATIONS		
Name	**Rhythmic Rocker**	
		
1	Clinical purpose	Rhythmic rocking is a must for sensory integration therapy as they encourage righting reactions, adjustments to linear acceleration and motor planning.
3	Technical characteristics	-Should have rocking feature; -Should have easy grip handles; -Should have non-slip foot steps; -Should have parent volume control; -Should have soft huggable body; -Should have min. load capacity 60 kg;
5	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
6	Warranty	1 Year
7	Documentation	-Technical manual to be provided

16. BALANCE BOARDS

TECHNICAL SPECIFICATIONS		
Name	**Balance boards**	
		
1	Clinical purpose	Balancing board featuring an unprecedented range of motion and variety of difficulties holds. It helps students in exploring entire 360 pendulum-like range of motion as they build balance, confidence, control levels and begin their solo attempts
2	Technical characteristics	-Should have unbreakable board with 1/2 dia sphere at the tip of its pedestal that support free floats; -Should have height adjustment feature ; -Should have non-slip footsteps; -Should have main. load capacity 60 kg;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided

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17. BALL POOL

TECHNICAL SPECIFICATIONS		
Name	**Ball Pool**	
		
1	Clinical purpose	Provide multi-sensory tactile stimulation as preschoolers balance, adjust, and move through them.
2	Technical characteristics	-Should have vinyl-covered base; -Should have one side is high-density foam padding; the other side is padded with low-density foam; -Should have inner measurement min. 5 feet in length and 5 feet in width; -Should have min. 500 multicolor soft plastic material balls; -Should have 4 in. thick foam walls 12 in. height
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided

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18. TUNNEL

TECHNICAL SPECIFICATIONS		
Name	**Tunnel**	
 		
1	Clinical purpose	Stimulate the imagination for creative playtime.
2	Technical characteristics	-Should have durable polyester fabric in bright colors; -Should have one side is high-density foam padding; the other side is padded with low-density foam; -Should be min. 8 feet in length and 1.5 feet diameter which provides space for easy crawl through fun; -Play Tunnel can attach to other Playhut play structures creating additional play pattern options; -Should have light weight and portable; -Should have 4 in. thick foam walls in circular pattern;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year
5	Documentation	-Technical manual to be provided

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19. BEAN BAGS

TECHNICAL SPECIFICATIONS		
Name	**Bean bags**	
 		
1	Clinical purpose	For seating purpose
2	Technical characteristics	-Should be filled with fire retardant polystyrene beads; -Should have durable material in bright colors; -Should have measurements: 60cm x 60cm x 60cm, Bean Refill volume: 2.5 cubic feet; -Should be light weight and portable;
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year

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20. REAL SIZE ANIMAL TOYS

TECHNICAL SPECIFICATIONS		
Name	**Real size animal toys**	
 		
1	Clinical purpose	Playing purpose;
2	Technical characteristics	Should have ultra-soft multicolor fur for realistic feeling -Should available in different choice of animals toys -Should have light wieght and portable -Should be washable under washing machine
3	User's care, Cleaning, Disinfection & Sterility issues	Unit layout to enable easy cleaning of all surfaces.
4	Warranty	1 Year

H. PHYSIOTHERAPY EQUIPMENTS

S.No.	Name	Specification	Quantity
1	**Therapy Ball**		
1.1	65 cm	Brightly colored, inflatable by foot pump. Molded heavy duty vinyl ball can support weight up to 150 Kg	1
1.2	45 cm		1
2	**Therapy Mats - 6ft X 3ft**	Length 6ft and Breadth 3 ft, made up of rubberized foam, vinyl coated cover, thickness 4cm, can be wiped clean with a damp cloth	6
3	**Bolster**		
3.1	2ft long, diameter-8 inch	Sponge cover on wooden shaft, outer side is covered with rexene is fixed to the wooden shaft with thick pins	1
3.2	2ft long, diameter-10 ichn		1
4	**Small roll -13 inch long, Diameter 3 inch**	Sponge roll covered with rexene	3
5	**Prone Wedge**		
5.01	Big-Ht- 14 inch; Length-31 inch, breadth 17 inch	Foam filled wedges covered with Nylon, fitted with velcro straps to position the child	1
5.02	Small ht 10 inch, length 26 inch and breadth 17 inch		1
6	Balance Board	Rexene Covered cushioned platform size 45cm X60cm X15 cm high	1

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7	Kaye- Walker (ht- 48to 64 cm)	Ht 48-64 cm, distance between hand grips34 cm, frame width 58-60 cm, frame length 69-83 cm, user ht 107-137 cm, maximum user weight 39 kg, frame weight 3.85 kg	1
8	Tampoline	Compact round trampoline, shape-round, light jumpers. Dimensions, diameter of the mat 2.5m, surface area of the mat (4.9 mt sq.) minimum lateral installation clearance (5.5m), Jumper weight rating 80 Kg, structural load capacity 380 Kg, ht of the flexi-net above mat 1.5m, total height 2.3m	1
9	**Bolster Swing**	With nylon rope or straps with hooks to fit in the swing frame. Size 25 cm diameter X 90 cm long	1
10	**Wooden benches with cushion and Rexene Cover**		
10.1	Wooden Bench	Small (3ft long, ht 8 inch, breadth 6 inch)	1
10.2	Wooden Bench	Big (3 ft long, ht 12 inch, breadth 8 inches)	1
11	**Splints (Ankle Foot Orthosis)**	1 pair	1
12	**Special chairs with cut out tray**	1	1
13	**Toys (for play and stimulation)**		
13.1	Small Rattles		10
13.2	Squeaky		3
13.2	Puja Bell (clapper bell)		2
13.4	Soft Toys		10

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13.5	Brush for tactile stimulation		1
13.6	Theraputy	Glutenfree, non-toxic, red, yellow and blue colors 3 containers	3
13.7	Peg Board	Laminated square board having 10 holes to hold smothly finished solid plastic pegs in 5 different bright colors	2
13.8	Ball Pool	The dense foam padded mini ball pool is soft, safe and perfect for small children. It provides an excellent sensory stimulating activity. The round pool is 120 cm in diameter X 50 cm high & has 10 cm thick padded sides. The pool contains 500 multi color balls of 7cm or 8cm diameter. Pool side and bottom is covered with durable rexen that easily wipes clean	1
13.9	Balls of different sizes		5
13.10	Gaiters	Aluminium/bamboo stick of 8",10", 12", 14" long inserted in the pockets of thick canvas, 3 velcro straps to be wound around	8

13.11	Thick Handle spoon,	Stainless steel spoon, padded handle	12
13.12	Thick handle bent spoon		
13.13	Stainless steel plates with high rim		
13.14	Spouted cups		
13.15	Plastic spoon with long handle for babies	long handle bright color spoon	3
13.16	Plastic glass with rim cut on one side	Plastic glass with one side of the rim is cut to accommodate nose	

DETAILS-

THERAPY EQUIPMENTS and ADAPTIVE SEATS:

1. THERAPY BALL- 1BIG (65CM), 1SMALL (45CM)

a. 65 cm Brightlycolored, Inflatable by foot pump.
Molded heavy duty vinyl ball can support weight up to 150 kg

b. 45 cm and a pump fpr inflation

2. THERAPY MATS- 6FT X3FT (06)

a. Quantity - 6 mats
b. 6ft x3ft (Length 6 ft and breadth 3ft
c. made up of Rubberized foam
d. vinyl coated cover
e. thickness 4 cm, can be wiped clean with a damp cloth

3. BOLSTER-

a. 2ft long, diameter- 8 inch **(01)**
b. 2ft long, diameter- 10 inch**(01)**
c. Sponge cover on wooden shaft, outer side is covered with Rexene, Rexene is fixed to the wooden shaft with thick pins

A child is encouraged to roll into prone by rolling the bolster backwards

4. SMALL ROLL -

13 inch long, Diameter-3 inch
Quantity -3 rolls

The child is placed in prone over a roll

A roll is placed under the head to inhibit extensor Tone while the mother is changing nappy

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5. PRONE WEDGE-

Big- Height-14 inch; Length- 31 inch,
Breadth- 17 inches
Small- Height-10 inch; Length- 26 inch

Quantity -2 wedges, 1 big and 1 small

The mother encourages her child to lift her head and trunk by shaking a rattle when the child is placed prone on a wedge. The child is lifting her head and weight bearing through her arms on a bolster

6. BALANCE BOARD-

Length- 29.5 inch,
Breadth- 23
inch, Height-
2.5 inch

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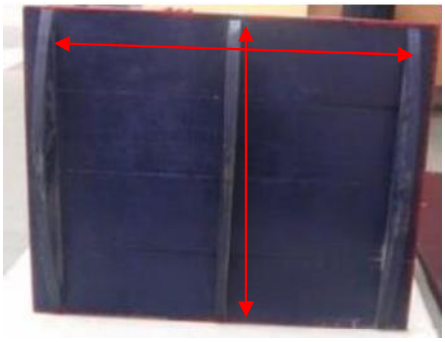
Underside of the Balance board



7. TRAMPO LINE

8. KAYE-WALKER

9. BOLSTER SWING-

Quantity - big - 300mm diameter and 1.5 meter long

small-300mm diameter and 1.2 meter long

10. SPECIAL CHAIR WITH CUT OUT TRAY (TAILOR MADE ACCORDING TO NEED OR THE CHILD)

11.TOYS LIKE BALLS, RINGS, SQUEAKY TOYS FOR STIMULATION

Puja bell

Rattle

Rattle

Squeaky toy

Squeaky toy

Soft toy

stimulation

Brush for tactile stimulation

Toy for tactile stimulation

Plasticin

Peg board

Peg board

Small swing

Ball Pool

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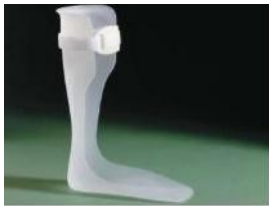
Bolster Swing

Bench

12.MODIFIED CHAIRS (WOODEN WITH CUSHION COVERED WITH REXENE)-

Child sits in a modified chair with a cut-out tray in front. The chair has castors for easy transportation

13. SPLINTS (ANKLE FOOT ORTHOSIS)



14. WOODEN BENCHES WITH CUSHION AND REXENE COVER (3FT LONG AND 4, 6, AND 8 INCHES HEIGHT)

Name & Signature of Authorized Signatory
Name & Seal of the Firm/ Agency
Address:
Telephone/ Fax
Email-

15.CUT-OUT FLOOR TABLE (2FT×2FT) QUANTITY

16. FLOOR SEAT (PELVIC STRAP):

Name & Signature of Authorized Signatory
Name & Seal of the Firm/ Agency
Address:
Telephone/ Fax
Email-