



ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Bhubaneswar, (Odisha) – 751 019

Website : www.aiimsbhubaneswar.edu.in

E-Tendering Portal: <https://www.tenderwizard.com/AIIMSBBBSR>

E-TENDER DOCUMENT

Name of the e-Tender : “ESTABLISHMENT OF A REGIONAL SIMULATION LAB AND CAPACITY BUILDING CENTRE FOR NURSES AND HEALTH CARE WORKFORCE AT AIIMS, BHUBANESWAR”

Notice Inviting E-Tender

E -Tender No. 11042/033/AIIMSBBBSR/CON/21-22/01

Dated 09-04-2021

The Director, AIIMS Bhubaneswar, invites E-Bids in Two Bid System (i.e. Technical Bid and Financial Bid) from eligible Manufacturers/ Companies/ Firms /Authorized Agents / Distributors /Dealers online through E-procurement solution portal of AIIMS Bhubaneswar (<https://www.tenderwizard.com/AIIMSBBBSR>) as per terms and conditions contained in this document for satisfactory performance for ESTABLISHMENT OF SIMULATION LAB at AIIMS Bhubaneswar as per the Specifications mentioned in Technical Bid.

The Bidder is expected to examine all Instructions, Terms and Conditions, Forms, and Specifications in the bidding document. The bid should be complete and in the prescribed format as per the requirement of the bid document. **The bid should not be conditional.** Failure to furnish all information required by the bidding document or submission of a bid not responsive to the bidding documents in all respect will be at the Bidder's risk and may result in rejection of the bid.

E-Tendering Portal:

<https://www.tenderwizard.com/AIIMSBBBSR>

For E-tendering Queries contact Representative of ITI Limited (Bhubaneswar).

Email: twhelpdesk614@gmail.com **or** twhelpdesk404@gmail.com , **Mob:** 07377708585 /011-49424365.

E-TENDERING SCHEDULE

Name of the e-Tender : “ESTABLISHMENT OF A REGIONAL SIMULATION LAB AND CAPACITY BUILDING CENTRE FOR NURSES AND HEALTH CARE WORKFORCE AT AIIMS, BHUBANESWAR”.

Date of availability of E-Tender document in the AIIMS BBSR E-Tendering Solution portal	As per e-Tendering Portal of AIIMS Bhubaneswar www.tenderwizard.com/AIIMSBBBSR www.aiimsbhubanewar.edu.in and CPP Portal www.eprocure.gov.in for downloading/ participating
Last Date of downloading/ participating in the E-Tendering Solution for this E-Tender	As per e-Tendering Portal of AIIMS BBSR https://www.tenderwizard.com/AIIMSBBBSR
Date, Time & Place of submission of Hard Copies of indicated/ desired documents in the Sealed Envelope	As per e-Tendering Portal of AIIMS, Bhubaneswar https://www.tenderwizard.com/AIIMSBBBSR in the Tender box kept in the Office of the Sr. Procurement-cum Store Officer, Academic Building, AIIMS, Bhubaneswar -751019 (Odisha)
Date, Time & Place of Opening of Technical Bid	The Technical Bid will be opened online as per the schedule given in the https://www.tenderwizard.com/AIIMSBBBSR
Tender Document Cost payable to AIIMS Bhubaneswar	To be downloaded from website, hence no cost is applicable.
E-Tendering Solution processing fee for providing online participation support & necessary DSC Certificates to Vendor for participate in Online E-Tender process	As applicable and displayed on https://www.tenderwizard.com/AIIMSBBBSR and payable to www.tenderwizard.com directly by the prospective Bidder.
Bid Security/ EMD	Bid Security Declaration as per OM No.F.9/4/2020-PPD dated 12 Nov. 2020 issued by Procurement Policy Division, Department of Expenditure, Ministry of Finance

Important Dates of Tender

Issue / Publishing Date	:	Dt. 09-04 -2021
Date & time of Pre-bid Conference	:	Dt. 19-04-2021 at 15.00 PM at All India Institute of Medical Sciences, Bhubaneswar - 751019
Last date and time of submission of e-tender	:	Dt. 15-05 -2021, at 11:00 AM
Date & time of opening of e-Tender	:	Dt. 15-05-2021 at 12.00 PM
Date & time of opening of Financial Bid	:	To be notified in due course in the portal

CHAPTER-I

INSTRUCTIONS TO BIDDERS (ITB)

1.1 The Procurement of goods and services under this tender will be regulated as per the applicable provisions of Public Procurement (Preference to Make in India), order 2017 of MoC&I (DIPP), Government of India. The condition of prior turnover and prior experience may be relaxed for start-ups (as defined by Department for Industrial Policy & Promotion) subject to meeting of quality & technical specifications. Therefore, bidders who are claiming to be regulated under the said order are to submit documentary evidence in support of their claim.

1.2 The Bidder shall bear all costs associated with the preparation and submission of its bid and AIIMS, Bhubaneswar will in no case be held responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

1.3 Bid Validity:

The validity of the Bid/ Tender Document shall be for 180 days from the date of opening of the bid.

1.4 Bidder: Tender should be quoted only by the original manufacturer (OEM) or by their authorized distributor or selling agent. Bidder other than OEM shall submit a current authority letter from the original manufacturer concerned in the format given at “**Annexure-III**”.

In case where the manufacturer has submitted the bid, the bids of its authorised dealer will not be considered and EMD will be returned.

A bidder shall not have conflict of interest with other bidders. If any of the bidder found to have conflict of interest shall be disqualified.

1.5 Bidders are required to quote strictly as per specification of the equipment/ Instruments/ Apparatus. Deviation if any to specification, must be brought out clearly giving deviation statement in **Annexure-IV**.

1.6 Earnest Money Deposit (Bid Security):

Item No.	Description	Qty.	EMD (Rs.)
1.	Establishment of Simulation Lab	01 no.	0.00

1.7 The selected Vendor will be expected to complete the Work by the Intended Completion Date and provide onsite **warranty for 5 years and the project will run on the basis of CMC for a period of two-years after expiry of the warranty period.**

Procurement OF ITEMS/ SERVICES THROUGH NON-GeM MODE OF PROCUREMENT

Para-1 – As per the Circular No. F.6/182019-PPD issued by Ministry of Finance , Dept of Expenditure dated **23 Jan 20** regarding procurement of goods/ services through Non GeM, bidders are required to submit documents for the same.

(a) Bidders to submit the GeM registration details that they are already registered in GeM as the category of the product is not available in GeM, they are not able to participate in it. It is mandatory to submit the relevant documents as supporting evidence.

(b) An undertaking also to be given in company letter head that “**Such already registered suppliers should be boarded on GeM as and when the item or service gets listed on GeM**”.

EXEMPTION OF EMD/ REDUCTION IN PERFORMANCE SECURITY

Para- 02 – As per the Circular No. F.9/4/2020-PPD issued by Ministry of Finance , Dept of Expenditure dated **12 Nov 20** regarding procurement of goods/ services.

(a) **For broader participation of bidders** due to present situation due to pandemic situation, the bidder is exempted from submission of Bid Security during **Tendering/ Bidding**. Further, in lieu of **Bid Security (EMD)**, bidders to sign "**Bid Security Declaration**" accepting that if they withdraw or modify their bids during period of validity etc., they will be suspended for the time specified in the tender documents.

(b) In case of "**Performance Security**" as per Ministerial guidelines the Performance Security is reduced from **05 to 10 % as per GFR 2017 to 03 %**.

1.7 Pre-Bid Conference (PBC):

All the prospective bidders are requested to attend the Pre-Bid Conference at Board Room, Academic Block, AIIMS Bhubaneswar on 19-04-2021 at 3.00 PM to have a clear understanding on schedule of requirements, specifications and on terms & conditions of the tender. After due deliberation, changes if any may be incorporated in the tender document and will be uploaded on our official website as "Corrigendum". Therefore, bidders may submit their bid accordingly as per changes if any incorporated after PBC. No press advertisement will be made for corrigendum(s).

Due to ensuing restrictive situation through out the country following Corona pandemic, local representative of the prospective bidders may participate in PBC. Those who are not able to attend the PBC may submit their queries/ doubts/ representation/ clarification by e-mail to below mentioned ids on that day which will be taken care of by the tender committee in consultation with the user department.

1.8 Clarification of bidding documents :

A prospective bidder requiring any clarification of the bidding documents shall contact the purchaser in writing at the purchaser's e-mail address i.e. aso@aiimsbhubaneswar.edu.in & spo@aiimsbhubaneswar.edu.in. The purchaser will respond in writing (through e-mail) to any request for clarification, provided that such request is received not later than 10 (ten) days prior to the deadline for submission of bids.

1.9 Amendments in Bidding Documents :

At any time till **7 (seven) days** before the deadline for submission of bids, the AIIMS Bhubaneswar may, for any reason, whether at own initiative or in response to a clarification requested by a prospective Bidder, modify the bidding document through amendment. All amendments will be uploaded on the website regularly. AIIMS, BBSR shall not be responsible to notify the amendments to individual bidders. All amendments by the AIIMS, BBSR till 7 (seven) days before the deadline for submission of bids, shall be binding on the participatory bidders.

1.10 Two Bid System :

The tender shall be submitted in 2 (Two) parts online:

1.10.1 Technical Bid: All required documents to be submitted are online.

The institute requires the items as mentioned under Chapter-II to be used by the Department of Nursing, AIIMS, BBSR. The items are to be delivered within 90 days from placing of Purchase Order at the Central Store of AIIMS Bhubaneswar at the quoted/ negotiated price without any additional cost to the institute as per specifications given in the said Chapter.

1.10.2 Financial Bid: Financial Bid is to be submitted on line. The Financial Bid of bidders, who qualify at Technical Bid Evaluation, will be opened thereafter.

The Rates are to be quoted in the given format as provided under **Chapter-III**.

All quoted rates should be inclusive of packing & forwarding charges, insurance charges & freight (transportation) charges, 05 (Five) Years Comprehensive Onsite Warranty inclusive of all spares & labour charges and GST (percentage of GST must be mentioned clearly).

The rates should be quoted in Indian Rupees in figures as well as in words.

If a firm quotes NIL charges / consideration, the bid shall be treated as unresponsive and will not be considered.

The firm shall quote for CMC (Comprehensive Maintenance Contract) charges for the next 2 years after expiry of the Onsite Warranty period of 5 years for each Equipment (on which the Warranty/ Guarantee is applicable). CMC charges should be quoted per equipment year wise as well as total CMC charges for all equipment (i.e., where number of procurement is more than one).

After due evaluation of the bids, Institute will award the contract to the responsive Bidder who has quoted the Lowest Price for the items including CMC charges for 2 years after expiry of 5 years Onsite Warranty/Guarantee period.

1.10.3 Manual Submission of Following Document in original:

The following documents are to be sent to Sr. Procurement-cum Store Officer, AIIMS, Bhubaneswar- 751019, separately in a sealed envelope superscripted as: e-Tender for “**ESTABLISHMENT OF A REGIONAL SIMULATION LAB AND CAPACITY BUILDING CENTRE FOR NURSES AND HEALTH CARE WORKFORCE AT AIIMS, BHUBANESWAR**”. The sealed envelope should reach on or before the last date & time of submission of e-Tender online.

- a. **Bid Security Declaration** in lieu of EMD as per given format in the tender document.
- b. Undertaking for acceptance of all Terms & Conditions as per **Annexure- I**.
- c. Notarised affidavit on Indian Non-judicial stamp paper of Rs.10/- as per **Annexure-II**
- d. Details of Make & Model of Equipment/Models & Country of Origin without mentioning price.
- e. Technical Literature/ Catalogues & documents that are technically relevant and supportive to the bid.
- f. Manufacturers Authorisation certificate in case of authorised distributor of OEM as per **Annexure- III**.
- g. The statement of deviation (parameter wise) from the tender technical bid specification as per
- h. **Annexure – IV**.

1.11 Withdrawal, Substitution and Modification of Tender:

No bid will be allowed to be withdrawn in the interval between the deadline for submission of bids and expiration of the period of validity. Withdrawal of a bid during this period will result in forfeiture of the bidder's bid security (EMD).

1.12 Evaluation of Bid :

The bid will be evaluated as per the documents asked in this bid and contract will be awarded to the bidder who has quoted lowest price for the total items with five years comprehensive warranty including charges for two years post warranty CMC. Cost of consumables, accessories and spare parts wherever required will have to be quoted for future recurring requirements as per format provided in the bid document. However, these prices will not be taken into consideration while arriving at L-1 price.

**Sr. Procurement-Cum-Store Officer
AIIMS, BBSR**

CHAPTER-II

Project Summary & Broad Scope of work

1. Project Summary

With reference to NITI Aayog's recommendation, the Ministry of Health & Family welfare (Nursing Section), Government of India, New Delhi has instructed AIIMS, Bhubaneswar to develop centers of excellence in nursing that set the benchmarks of academic excellence in the country. In this regard AIIMS, Bhubaneswar proposes to establish a Regional Simulation Lab and Capacity building center for Nurses and Health care workforce. The proposal highlights the importance of competency-based training, establishment of skill lab, infrastructure and resources required to establish regional skill center.

- **Broad objectives:**

1. To train the Nurses and other health care workers with necessary skills.
2. To evaluate the impact/outcome of skill-based training through highly structured tools and system.
3. To validate competencies at regular interval and take corrective action.
4. To make suggestion for restructuring curriculum to stakeholders.
5. Training of Master trainers.

- **Nature of Training to be imparted by the Regional Lab:**

1. Induction.
2. Periodic training.
3. Contingency based programs during epidemic/disasters.
4. Continued Competency Based Programs.
5. Caregiver/Client capacity Building Program.
6. Training of Master trainers.
7. Skill assessment center – Selection, Recruitment, Promotion in Central Government / Overseas.

2. Scope of Work: The Vendor desirous of participation in this effort shall be responsible for the following:

- a) Supplying, configuring and installing, commissioning of Lab items;
- b) Supply and installation of the required furniture for display and storage of the supplied models.
- c) To provide Technical assistance for a period of 1 year for upkeep and maintenance of Nursing Simulation lab;
- d) Provisioning the access control and audit trail mechanism as per industry standard and security norms defined by various regulatory bodies;
- e) Providing facility to define rule-based access depending on usage, time duration, etc.

List and Quantity of items for Simulation Lab

S. No.		Quantity
A. PATIENT CARE SKILLS		
1.	Seamless limbs Patient Care Simulator	1
2.	NG, OG & PEG Tube Feeding Simulator	1
3.	Airway Suction Training simulator	2
4.	Advanced Oral care Simulator	3
5.	Medical Foot Care Simulator	1
6.	Decubitus Treatment Model	1
7.	Male Catheterization & Enema Simulator	1
8.	Female Catheterization Simulator	1
9.	Physical Assessment Trainer	1
10.	Pitting Edema Simulator	1
B. INJECTION SKILL MODELS		
1)	I.V. Arm with circulation pump	3
2)	Intradermal injection Training simulator	2
3)	Arterial Puncture Training Simulator	1
4)	Basic IV Arm:	2
5)	Intravenous Arm Simulator (Two arm and circulation pump set):	2
6)	Peripheral Venous Catheter Placement Simulator	2
7)	Lumbar Puncture Simulator	1
8)	Gluteal Intramuscular Injection simulator II	2
9)	Gluteal Intramuscular Injection Model II	2
10)	Pediatric IV hand simulator	1
11)	Multipurpose Injection Model	2
C. OBSTETRIC AND GYNAE SKILLS		
1)	Vaginal Examination Model (Vulva)	1
2)	Full- Body Pregnancy simulator	1
3)	Maternity Model	3
4)	Midwifery Practice Model	2
5)	Fetal Head Extractor for Obstetric Model	3
6)	Female Organ Model	3
7)	Breast Cancer inspection and Palpation simulator	3
D. PEDIATRIC CARE SKILLS		
1)	Hi-Fidelity Baby/Neonate Basic Life Support (BLS) Simulator with Full CPR Parameter Reporting and Analysis	2
2)	Neonatal Resuscitation Simulator	3
3)	Infant Girl Model for nursing Practices	4
4)	Neonatal Vital Signs Simulator	1
5)	Infant Nursing Practice Model	3
6)	Paediatric Patient Care Simulator	1
7)	Paediatric Lumbar Puncture Simulator	1
E.	AUDIO VISUAL SYSTEM	1

Table of Contents

A.	PATIENT CARE SKILLS	9
1.	Seamless limbs Patient Care Simulator	9
2.	NG, OG & PEG Tube Feeding Simulator.....	9
3.	Airway Suction Training simulator	10
4.	Oral care Simulator Advanced.....	10
5.	Medical Foot Care Simulator.....	10
6.	Decubitus Treatment Model	11
7.	Male Catheterization & Enema Simulator	11
8.	Female Catheterization Simulator.....	11
9.	Physical Assessment Trainer	12
10.	Pitting Edema Simulator.....	12
B.	INJECTION SKILL MODELS	12
1)	I.V. Arm with circulation pump	12
2)	Intradermal injection Training simulator	13
3)	Arterial Puncture Training Simulator	13
4)	Basic IV Arm:.....	13
5)	Intravenous Arm Simulator II (Two arm and circulation pump set):.....	14
6)	Peripheral Venous Catheter Placement Simulator	14
7)	Lumbar Puncture Simulator.....	14
8)	Gluteal Intramuscular Injection simulator	15
9)	Gluteal Intramuscular Injection Model II	15
10)	Pediatric IV hand simulator.....	15
11)	Multipurpose Injection Model.....	15
C.	OBSTETRIC AND GYNAE SKILLS	16
1)	Vaginal Examination Model – Vulva II.....	16
2)	Full- Body Pregnancy simulator	16
3)	Maternity Model Type II	17
4)	Midwifery Practice Model.....	17
5)	Fetal Head Extractor for Obstetric Model.....	17
6)	Female Organ Model	18
7)	Breast Cancer inspection and Palpation simulator	18
D.	PEDIATRIC CARE SKILLS	18
1)	Hi-Fidelity Baby/Neonate Basic Life Support (BLS) Simulator with Full CPR Parameter Reporting and Analysis	18
2)	Neonatal Resuscitation Simulator.....	19
3)	Infant Girl Model for nursing Practices	20
4)	Neonatal Vital Signs Simulator	20
5)	Infant Nursing Practice Model.....	20
6)	Paediatric Patient Care Simulator	21
7)	Paediatric Lumbar Puncture Simulator II	21
E.	AUDIO VISUAL SYSTEM	22

Specifications for Nursing foundation Lab

A. PATIENT CARE SKILLS

1. Seamless limbs Patient Care Simulator

1. The model have seamless arms and legs for realistic training without any joints in elbow, wrist, knee and ankle as in human beings.
2. Life like multipurpose training manikin made of high quality silicone rubber with full articulation and anatomical landmarks.
3. The model is suitable for training in appropriate patient handling to change the body position & providing support to transfer the patient to a wheel chair.
4. The manikin allow training in assessment of chest and abdomen including abdominal inspection, palpation and percussion
5. The manikin is suitable for training in infusion care and management including IV injection, infusion and securing of cannula & cannula caring at left median vein and left hand dorsal vein
6. The manikin is suitable for training in chest compression and airway management using normal and video laryngoscope. Successful ventilation can be confirmed by lung expansion and auscultation of chest
7. Having facility to practice intradermal and intramuscular injection at shoulder, thigh and hips
8. Allow changing the appearance of the simulator using interchangeable face masks, wigs and genitals for different simulation settings and realistic trainings.
9. The manikin have realistic articulating jaw and removable dentures to facilitate oral care training including Brushing support, Oral massage & Denture care.
10. Patient have a replaceable wig for hair combing and shampooing training.
11. Manikin is suitable for training of students in following skills
 - a. Oral and nasal Tube feeding
 - b. Airway suction and Tube handling , Tracheostomy care and management including aspirarion
 - c. Oxygen inhalation
 - d. Oral and denture care
 - e. Perineal care , Vaginal washing
 - f. Bed bathing, hand and foot bathing, Change of clothes & diapers
 - g. Bedpan practice, stomach pumping , Bowel irrigation
 - h. Understanding on visible and palpable central venous port
 - i. Urinal catheter insertion and stimulation for urine flow
 - j. Enema, Suppository insertion, Digital disimpaction
 - k. Postmortem care
 - l. Patient handling for postural drainage
 - m. Pressure sores care with valve and inflated ballon
 - n. Stoma care, IV route care – drainage pump for simulating fecal content outflow
 - o. Passive exercise, postural drainage
 - p. Fomentation , bandaging
12. Having a detachable legs for easy storage and transportation
13. The Manikin is supplied complete with
Manikin, Denture, Female wig, Elderly wig, face mask-Female, Face mask elderly, simulated faces, Male and female Genitalia, Female genitalia for suppository insertion/disimpaction, Simulated suppository, Injection pads for median vein, shoulder, Thigh and Hip ,lubricant for airway and catheterization, Drainage pump for urinary bladder and rectum, Irrigation bag, Clothes for manikin.

2. NG, OG & PEG Tube Feeding Simulator

- 1) The simulator has life like design to provide training in realistic enteral tube nutrition procedures- intranasal, oral feeding catheterization and gastrostomy.
- 2) Simulator is up of special silicon material giving life like appearance and feel
- 3) Have route model for nasogastric tube feeding to facilitate trainees to understand the anatomy.
- 4) The manikin has three routes for EN tubes and allow training with real liquid food
- 5) The stomach has capacity of approximately 300cc
- 6) It has facility for practicing PEG tube setting with balloon and care.
- 7) Possibility to set the manikin in fowlers position
- 8) Manikin has flexible neck to allow learning of appropriate neck/head positioning

- 9) It allow confirmation of right placement of catheter inside the stomach by using stethoscope.
- 10) Allow training in stomach pumping(lavage)
- 11) Have transparent anatomical structure to allow visualization of the progress and the placement of tube /passage of catheters.
- 12) Simulator has feeding route panel and chest anatomy overlay for demonstration and anatomical understanding
- 13) Simulator is supplied complete with :
male torso manikin, support base, Drain tube, funnel ,plastic cup, tube feeding routes panel, chest overlay sheet

3. Airway Suction Training simulator

1. Simulator is suitable for Intraoral, Intranasal and endotracheal Airway suction training for caregivers and healthcare professionals
2. It has real life like representation of human respiratory organs for airway suction for choking patients and catheter insertion training
3. It is made up of real life like material with life like tactile qualities
4. It has life size structure of all respiratory organs such as mouth, tongue, oral and nasal pharynx, trachea, epiglottis and esophagus for effective training.
5. It allow Catheterization training through oral , nasal or tracheostomy opening pathways
6. It is having a side window to facilitate observation of passage of catheter and Life size organs to facilitate learning proper catheter insertion length for choking patients
7. Having realistically simulated sticky sputum
8. The simulator is easy to handle, washable and easily dismantlable for cleansing
9. Supplied complete with
 - i. Head and neck model
 - ii. Lubricant and simulated sputum
 - iii. Catheters, Syringe & metal tray
 - iv. Replacement skin with trachea
 - v. Customized Storage case

4. Oral care Simulator Advanced

1. An anatomically correct oral cavity, trachea, esophagus and replacement dentures.
2. Denture with tooth disease provides training in assessment and care of oral cavity.
3. Training in realistic oral cleaning procedure using residue.
4. This simulator provides training using water, and also training of suction.
5. Specifications:
 - head/neck manikin
 - base
 - normal denture
 - denture with tooth disease
 - denture case
 - simulated residue
 - mirror
 - sponge-tipped swabs
 - toothbrush
 - denture brush
 - carrying case
 - instruction manual

5. Medical Foot Care Simulator

1. Replaceable nails, corn and callosities provide excellent training opportunities with true-to-life feeling.
2. The foot model helps to demonstrate anatomical landmark, for assessment procedure, foot massaging and other day-to -day treatment.
3. Specification:
 - foot model with swivel stand

- toe nails A (thickened ingrown nail)
- toe nails B (thickened nail with ringworm)
- callosities
- corns
- instruction manual

6. Decubitus Treatment Model

1. The model reproduce realistic decubitus formed on the sacral region for teaching and training of students
2. The model is made of soft silicon rubber with realistic life like appearance , texture , touch and feel of human body
3. The model consist of six layers of skin to represent stage I to IV of decubitus
4. It allow all Six skins to be layered on together and peeled off one by one to show progression of decubitus
5. Consist of 6 different skins with holder belt to represent the various 4 stages of decubitus.
6. The four stages of decubitus with 6 different skins have following symptoms:
 - i. Stage I (Skin 1): Circumscribed skin flare with no injury on skin
 - ii. Stage II (Skin 2 and 3): Partial defect of skin with blister formation.
 - iii. Stage III (Skin 4 and 5): defect to Subcutaneous tissue with formation of pocket
 - iv. Stage IV (Skin 6): deep Defect down to muscle, bone and formation of support tissue pocket, requiring surgery.
7. Possible to fit all decubitus models to a human or on a model with belt for teaching and training.
8. The material of the model allow application of ointment and surgical treatment to be performed on the skin.
9. The model is supplied complete with – Six different types of skin representing stage I to IV decubitus, holder belt.

7. Male Catheterization & Enema Simulator

1. It is a life like, anatomically correct simulator for practicing male urethral catheterization, perineal care and enema by water.
2. It is made up of real life like special silicon material with life like tactile qualities
3. It has a detachable and interchangeable male organs to allow independent use without the lumbar torso
4. Having soft genitals to allow holding the penis in perpendicular position for insertion of balloon catheters.
5. Penis have retractable foreskin and allow realistic cleansing.
6. It has provision for urine flow to indicate the correct catheter placement in urinary bladder.
7. The urinary bladder facilitate insertion and withdrawal of balloon catheter.
8. The bladder is compressible for discharging residual urine.
9. Allow practice of realistic Enema in lateral position and tube tip is blocked by inner walls of rectum when insertion is very deep.
10. Insertion and indwelling of balloon catheter as well as localization of urethral meatus is possible
11. Supplied complete with :
12. Lower Torso manikin, detachable Genital organ unit, Valves, rectum tube, drainage tube, irrigation bottle, lubricant, storage case

8. Female Catheterization Simulator

- 1) It is a life like, anatomically correct simulator for practicing female urethral catheterization, perineal care and enema by water.
- 2) It is made up of real life like special silicon material with life like tactile qualities
- 3) It has detachable and interchangeable female organs to allow independent use without the lumbar torso
- 4) Having life like soft, anatomically correct genitals for realistic feeling of catheter insertion.
- 5) Soft genitals allow realistic cleansing and procedures like parting the labia.
- 6) It has provision for urine flow to indicate the correct catheter placement in urinary bladder.
- 7) The urinary bladder facilitate insertion and withdrawal of balloon catheter.
- 8) The bladder is compressible for discharging residual urine.
- 9) Allow practice of realistic Enema in lateral position and tube tip is blocked by inner walls of rectum when insertion is very deep.
- 10) Insertion and indwelling of balloon catheter as well as localization of urethral meatus is possible
- 11) Supplied complete with :

Lower Torso manikin, detachable Genital organ unit, Valves, rectum tube, drainage tube, irrigation bottle, lubricant, storage case

9. Physical Assessment Trainer

1. Physical assessment trainer for teaching and training of students in basic techniques of inspection, palpation, Auscultation and percussion with **Patient Monitor Simulator**
2. It allow auscultation using normal real stethoscope for realistic teaching and training.
3. It is standing chest torso model.
4. The Torso model has anatomically correct rib cage with sternum.
5. The model has proper costal cartilage allowing inspection of cervix and chest
6. It has chest skeleton and simulation lungs along with built in speakers for Cardiac and respiratory sound auscultation.
7. Has got Minimum 7 speakers for life like breathing sounds & Heart sounds at anatomically correct locations
8. Physical assessment trainer is used for: Palpation & Percussion of chest Auscultation of cardiac and respiratory sounds.
9. All sounds are of high quality realistic and recorded from real patients for comprehensive training
10. All sounds have natural propagation across the chest wall
11. Facility for palpation of Lymph Node on Upper Clavicle and Palpation of thyroid Gland
12. Inter-costal space counting facility is there during palpation
13. Has got minimum 20 types of cardiac sound cases including Normal Sounds with splitting and Abnormal sounds: innocent murmur, midsystolic click murmur, mitral regurgitation, ejection Sound aortic site, aortic stenosis, aortic regurgitation, ventricular septal, atria septal defect and pulmonic stenosis, pulmonic stenosis and regurgitation and patent ductus arterious.
14. Heart sound is audible at Aortic, Pulmonic, Triscupid and Mitral area with independently selectable volume
15. Has the facility to adjust Heart rate for each case as per teaching need and scenario
16. Have got minimum 12 respiratory breathing sounds including: normal vesicular and bronchial breath sounds sounds, rhonchi, fine crepitations, coarse crepitations crackle, wheeze, nervous dyspneic respiration, dyspneic respiration at rest, cardiac asthma and dyspneic respiration in asthma
17. Breathing sounds is audible at Right Lung, Left Lung and respiratory tract with facility to adjust the volume independently
18. Able to simulate Normal and Abnormal left and right lungs independently for percussion of Thorax.
19. Have the facility to be connected to external speakers for Big class room teaching

10. Pitting Edema Simulator

1. Differentiation of the pitting edema: four different levels and a normal case
2. Examination procedure for edemas on the lower thighs
3. Specifications:
 - 5 variations of strap-on pitting edema model

B. INJECTION SKILL MODELS

1) I.V. Arm with circulation pump

1. Intravenous arm Simulator is made of life like special silicon material giving real feel of human IV Arm and realistic training in venipuncture, IV access and injection, blood collection and drip infusion
2. It is supplied with soundless leak proof circulation pump to reproduce real life like circulation of blood flow with uniform pressure.
3. Simulator provides realistic needle tip resistance of vein wall and provide life like flash back confirmation
4. Has three accessible venous lines at cubital fossa: basilica, median and cephalic veins
5. Life like touch and resistance of the injection sites allow vein palpation as in the real patient.
6. Supplied with 2 types of puncture pads for difficulty variation
7. Connections in Simulator is leak free and based on one-touch technology for easy connection and cleaning
8. Supplied complete with Adult arm with supporter stand, injection pads, injection pads (red), circulation pump, colouring powder jar

2) Intradermal injection Training simulator

1. The simulator is suitable for providing training for intradermal injection to the inner forearm.
2. Simulator is made up of special silicon material giving life like appearance and feel
3. Simulator simulate swelling of the skin whenever proper injection procedures is performed as in real life
4. It simulate life-like touch and resistance of the injection site
 - a. resembling the human arm
5. Has got easily changeable Injection pads
6. Material is self-sealing type and there are not any remaining traces of needle on the arm after injection
7. Simulator is supplied complete with
 - I. Puncture pads
 - II. forearm model
 - III. supporter stand
 - IV. storage case
 - V. instruction manual

3) Arterial Puncture Training Simulator

1. Simulator is suitable for training in radial arterial puncture, Arterial Blood sampling and radial line placement with true-to-life feeling.
2. Simulator is made up of special silicon material providing real life like appearance and feel
3. Simulator have palpable Arterial pulsation with anatomically correct location
4. It gives real feel of tissue resistance and artery wall with the injection needle.
5. It simulate Natural flashback of artificial blood into the needle
6. It has possibility to simulate Radial arterial line placement
7. It is made up of real life like self-sealing type material with No residual puncture trace at the injection site.
8. Simulator have an inbuilt Jar assembly for simulated blood
9. Have got facility to simulate different pulse strength using easy to operate knob
10. It is easy to operate One-touch and leak-free connections
11. It is easy to clean and maintain
12. Manikin size is compact and light weight.
13. Simulator is supplied complete with
 - i. Wrist and hand model
 - ii. Circulation pump
 - iii. Puncture skins inner and outer
 - iv. Replacement artery tubes
 - v. Silicon tape ,red color powder tube , plastic jar, connection tubes ,vinyl sheet, syringe , storage case

4) Basic IV Arm:

4. Flexible skin and palpable veins (replicates venous dilation)
5. Realistic needle tip feeling and blood flashback
6. Injection pad is easily replaceable and durable.
7. No needle marks remain.
8. Hemorrhage can be stopped by compressing with finger
9. Adhesive plaster sticks well to the arm and can be easily removed.
10. Arm and supporter stand integrated so that users can setup easily
11. Compact, lightweight and portable.
12. Tourniquet application
13. Venipuncture (including puncture with IV cannula)
14. Specification:
 - arm model with supporter stand
 - injection pad
 - syringe(50 ml)
 - jar of coloring powder(red)
 - spoon
 - injection bottle for simulated blood
 - carrying bag

5) Intravenous Arm Simulator II (Two arm and circulation pump set):

1. 2 kinds of puncture pads for difficulty variation
2. 3 accessible venous lines at cubital fossa: basilic, median and cephalic
3. Realistic needle tip resistance of vein walls.
4. "Flash-back" can be observed.
5. Specifications:
 - arm models with supporter stand
 - injection pads
 - injection pad(red)
 - circulation pump
 - jar of coloring powder(red)
 - set of spoon and plastic jar
 - instruction manual.

6) Peripheral Venous Catheter Placement Simulator with Peripheral Intravenous central catheter (PICC)

1. All training skills for peripheral route management
2. Two puncture site: median antebrachial vein and dorsal vein
3. Practice for the extension of hand skin and the application of pressure on vein.
4. Durable puncture pad with IV cannula.
5. Specifications:
 - arm model
 - injection pad for dorsal vein of hand
 - injection pads for median antebrachial vein
 - bottle for simulated blood
 - infusion set
 - infusion bag
 - syringe (50 ml)
 - plastic beaker
 - simulated blood sticks(swab type)
 - carrying bag
 - instructional manual.

7) Lumbar Puncture Simulator

1. The simulator should have an anatomical correct model of the lumbar spine to facilitate training to collect and measure CSF fluid under clinically realistic conditions for anatomical understanding.
2. The simulator should be made up realistic silicon material giving real life like appearance and feel
3. The simulator should be supplied with various types of puncture blocks viz- normal CSF, obesity CSF, senior CSF, senior obesity CSF and epidural for comprehensive Lumbar puncture training .
4. Simulator should consist of a transparent puncture block for direct observation of both the anatomy and the spinal needle path.
5. Simulator should be complete with replaceable puncture pad and skin
6. Should simulate the collection of cerebrospinal fluid and should also simulate its pressure.
7. It Should be possible to position the simulator in lateral direction and in sitting position with the help of support base.
8. Simulator should have lumbar spine with flexible joints which should be palpable to facilitate correct anatomical understanding
9. It should offer realistic tissue resistance to the needle tip.
10. Should allow practice of Skin preparation procedure on it.
11. Should allow Simulation of loss-of-pressure with water or air.
12. It should contain Epidural block to offer training in epidural puncture procedures with realistic needle-tip feeling
13. Simulator should be supplied complete with :-
 - I. Lumbar region model with skin cover.
 - II. Lumbar puncture blocks
 - III. Lumbar region support bases

- IV. reservoir pouch, tube, support base and syringe
- V. Guidebook

8) Gluteal Intramuscular Injection simulator II

- 1) It is realistic model for practice of Gluteal intramuscular injection.
- 2) The model is made of soft silicon rubber with realistic life like touch and feel of human body
- 3) It has injection site corresponding to von Hochstetter and Clark's measurement method.
- 4) It simulate actual sensation of the human skeletal structure and muscle to help in determining correct region and angle of injection
- 5) It give realistic sensation of needle insertion
- 6) It allow practice of complete injection procedure including needle puncture and infusion of simulated injection fluid.
- 7) It raise alarm if wrong region is accessed for injection
- 8) Have the facility of drainage of Injected fluid/solution by the drainage tube.
- 9) Supplied with stand for giving injection in lateral recumbent position
- 10) Have replaceable injection site components and epidermis
- 11) It is light weigh less than 4 Kg for easy transportation in the department and approximately 30 cm in height
- 12) Simulator is supplied complete with :
Main Body, spare injection sites left & right, drainage tube- (left & right), stand, storage case

9) Gluteal Intramuscular Injection Model II

1. Inserting the injection into an area other than the correct injection site causes the alarm to sound.
2. Practice a range of injection procedure, including needle puncture and infusion of simulated injection fluid(water)
3. The model closely simulates the human body so that users can practice locating and maintaining the correct injection site and performing injection at various angles under realistic conditions.
4. The model features a stand so that the injections with the patient in a lateral recumbent position can also be practiced
5. Replaceable injection site component and epidermis

10) Pediatric IV hand simulator

1. Simulator is suitable for practicing higher skills in performing safe IV procedures on small infant hands of varying ages with thin and soft veins that are difficult to find.
2. Simulator is suitable for training in pediatric dorsal hand vein injection
3. Simulator is made of life like special silicon material giving real feel of infant hand and soft veins
4. The simulator has got lifelike flexible fingers and the back of the hand allowing gripping and pulling as in real-life procedures.
5. Simulator has two puncture sites on the back of the hand.
6. It simulate Needle fixing procedure
7. It has provision of Blood collection.
8. Allow training in Intravenous infusion.
9. Simulator is supplied complete with
 - a. Injection arm-hands (one-year-old)
 - b. Injection arm-hands (three-year-old)
 - c. Stands
 - d. Circulation pump
 - e. Colouring powder (red), jar and beaker
 - f. compatible Storage case

11) Multipurpose Injection Model

1. The model is used as the injection sites for the various purposes like hypodermic, intramuscular, opisthenar and median vein intravenous (IV) injections.
2. The model is Life like human right arm which shows gravity pressurized blood vessel palpation.
3. The model is useful and durable for numerous injection practices on blood vessel tube.
4. The model have replaceable injection site, blood vessel tube and skin.
5. The model have moveable shoulder and elbow.
6. All the parts of model are perfectly fitted on stable stand and easy for dismantling.
7. No visible mark (needle holes) on the skin of Arm at injection site while practicing.

8. Supplied complete with
 - a) Main body
 - b) Arm skins (hand, forearm and upper arm)
 - c) Irrigator
 - d) Pinch cock
 - e) Simulated blood
 - f) Elbow rest
 - g) Table and stand
 - h) carrying case

c. OBSTETRIC AND GYNAE SKILLS

1) Vaginal Examination Model – Vulva

- 1) Bishop scores from the late stage of pregnancy to the onset of labor (cervical dilation, effacement, consistency and position) can be confirmed.
- 2) Tear resistant.
- 3) Sensation of clinging to the fingers by vaginal walls.
- 4) More realistic feeling of the ischial spines and pubic symphysis during vaginal examination.
- 5) Three models with varying degrees of uterine opening dilation are provided, along with a model of fetal head.
- 6) These can be interchanged and the degree of engagement can be adjusted, making it possible to gauge the progression of labor by means of vaginal examination.
- 7) The fetal head model can be used to gauge rotation of the fetal head by varying positions of the sagittal sutures and posterior fontanel.
- 8) The vulva has a urethral orifice for inserting a urinary catheter.
- 9) Specification ;
 - vaginal examination model-vulva II
 - Fixing screw
 - Uterus dilation model seals(4pcs)

2) Full- Body Pregnancy simulator

Main Body	Full- body manikin(with an abdominal cover)
Obstetric abdominal palpation parts	Skin II for obstetric abdominal palpation model
	Abdominal wall piece
	Fetus model with amnion
	Two-way stopcock
	Seitz method standard adjustment base
	Seitz method plus adjustment base
	AC adaptor
	Extension cord for heartbeat cord
	Baby powder
	Abdominal wall protective sheet
	Base
	Parts storage bag
Vaginal examination parts	Vaginal examination model-vulva II
	Uterus dilation model set (4 types)
	Uterus dilation model base
	Glycerine
	Storage case

Obstetric Assistant parts	Obstetric model-vulva II(primipara type)
	Fetal model
	Placenta model
	Umbilical cord kit (3 umbilical cord and 1 umbilical cord connector)
	Glycerine
Perineal suture parts	Perineal suture model-vulva
Puerperal palpation uterus	Skin for puerperal uterus palpation model
	Uterus recession model fixation model
	Uterus recession model (4 types)
	Baby powder
	Parts storage bag

3) Maternity Model Type

1. A special silicon rubber for trunk skin and fetus material with close appearance to human body for realistic practice.
2. A pelvis that enables realistic palpation to check the pubic pelvimetry, with a sensation that closely resembles and actual human body.
3. The amnion can be filled with air to make handling and control easier.
4. The air pressure level of air in amnion can be checked with an indicator and adjusted to change the palpation sensation.
5. An internal synthesizer enables auscultation of a realistic fetal heartbeat sound. Th volume and speed are freely adjustable.
6. Traube stethoscope monitoring of the fetal heartbeat can be practiced the heartbeat sound can also be emitted from speaker on the side of the panel.

4) Midwifery Practice Model

1. High quality model made of Resin material with Life like feeling, Shape & size.
2. Main body is of single piece torso model of pelvic region allowing midwifery practice based on LDR (labor, delivery, recovery)
3. Students are able to practice vaginal examination which can be done by replacing uterus model with 3 different dilations and fetal head model in the single vulva for palpation practice.
4. Vaginal Exam Vulva has got life like feeling
5. Has got Obstetric assistance model set. Perineum is elastic allowing for increased durability at the extraction. Use of Lubricant at the extraction decrease the resistance allowing realistic practice.
6. Perineo suturing of soft birth canal laceration in two Types (left and right) which gives real touch of suturing.
7. Vulva is made up of highly elastic & soft material giving feeling of the vaginal wall surrounding fingers.
8. All different parts are interchangeable and replaceable.
9. It is supplied with different uterus dilation model, fetal model, placenta model and suture model.
10. Delivery contents:
 - Vaginal examination model having vulva, 3 kinds of dilation model along with 1 fetal head.
 - Obstetric model having fetus, placenta, vulva with tightening screw.
 - Perineo suture model having 2 vulva for left and right side suture

5) Fetal Head Extractor for Obstetric Model

1. Fetal head extractor for training with Obstetric assistant model
2. It is of light weight and allow proper placement of fetus on it
3. It has a rotating hand wheel to move the fetus.
4. At the stage of extraction it reproduce stable appearing and crowning of fetal head
5. Have got adjustable extraction speed of fetal head and allow fetal head extraction without excessive power.

6) Female Organ Model

1. The model is useful teaching and practice of insertion & positioning of female contraceptive devices such as pessaries, rings and IUD and application of contraceptive agents.
2. It is made up of special silicon rubber to give real like realistic touch and feel of the skin, vagina and inside surface during examination practice.
3. The model is separated into right and left parts to show internal structure of vagina, uterus, bladder as well as skeletal structures.
4. It is useful for education and guidance of patient
5. The uterus can be separated in two parts for teaching the insertion and positioning of contraceptive devices
6. It has a realistically shaped and soft to touch Genitalia .
7. The genitalia is having closed Labia minora and concealed ostium vaginae as like in normal state of human body
8. The model is supplied complete with a storage case

7) Breast Cancer inspection and Palpation simulator

1. The model is suitable for teaching of self examination of breast cancer and for teaching of doctors, nurses and trainees in detection of breast cancer
2. The model is made of soft silicon rubber with realistic life like touch and feel of human breast
3. The simulator represent pathological symptoms like lumps and skin changes
4. It has got different symptoms of breast cancer which are as follows:
 - Lumps- Hard Lumps, soft lumps .
 - Lymph nodes metastasis – lymph nodes in axillary region, hard lymph node in neck
 - Nipple changes –Depression/displacement of nipple , Eczematous change
 - Skin changes- skin dimpling, partial edema of skin, skin redness & swelling
5. The model is stable so as to allow practice and inspection comfortably
6. Supplied complete with Training model, storage case
7. The model is of light weight about 3.7 kg

D. PEDIATRIC CARE SKILLS

1) Hi-Fidelity Baby/Neonate Basic Life Support (BLS) Simulator with Full CPR Parameter Reporting and Analysis

1. The simulator is suitable for conducting Comprehensive CPR Training with accurate, high fidelity real time digital feedback and is able to create a report on the analysis of skills performed.
2. It is of high quality full body Baby/Infant Manikin with real life-like look and feel and able to withstand vigorous training sessions.
3. Suitable for two hand, two thumb and In-arm CPR methods.
4. Able to simulate the lung capacity of one month old to 12 month old baby.
5. Able to simulate the lung capacity of a new born to 4 week old.
6. Possibility to adjust lung volumes with a single click to simulate more than eight different lung capacities.
7. It supports training of both paediatric and neonatal CPR.
8. It provides the ability to train in American Paediatric Association supported Protocol and in the American Heart Association supported Protocol.
9. Chest depth movement must provide for physical movement well in excess of 1/2 of baby's chest thickness and must be warranted for 1 million compressions
10. Manikin not require internal batteries for operation and work without internal batteries at all times.
11. Easy to clean hygienic system with disposable head bag and is supplied with multiple faces for hygiene.
12. Having auto-calibration facility to determine the pressure on the chest and current position of the chest before training activities are started and store this information in the data file for each compression activity.
13. Facility to measure, record and continuously display real time colour coded bars accurately indicating the quality of Chest Compressions including rate, depth, degree of release /non release, too deep compressions and hitting the bottom to enable the instructor and student take immediate corrective action.

14. The simulator show the degree of non-release of the chest for each chest compression and report is available.
15. The simulator display a graph showing the real time ongoing effect of the quality of CPR being performed and of the number and length of time of interruptions to compressions on the state of cerebral perfusion.
16. Facility for measurement and objective real time display of information for the volume of ventilations and timing of ventilations and the rate of air flow for all ventilations activities.
17. It provide Real Time Visual Colour Display for the Rate of flow of air into the lungs and display to an accuracy of 0.01 seconds as air flows into the lungs.
18. It provide for the measurement and display of the volume of air flow in litres or cubic centimetres for each ventilation.
19. It provide for the measurement of the Interval between Ventilations during Rescue Breathing and display to an accuracy of 0.01 seconds.
20. It provide for a specific activity to improve how CPR Breaths are performed where the volume, rate and interval between the 2 breaths is timed.
21. It provide for the training of 3:1, 15:2 and 30:2 CPR where the volume and rate of the ventilation as well as the interval between the two breaths is accurately displayed.
22. It has a self-test mode where the visual Feedback can be turned On or Off and this state is reflected in the saved data file.
23. It has a feature to turn on and off a Metronome (an audio feedback to help with timing during activities).
24. It has a feature to modify the training parameters such as changing the number of cycles and number of compressions to suit particular training needs.
25. There is no limit on number of users and possibility to install the software application on a normal windows laptop computer or multiple windows laptops without any additional license cost/user fee.
26. It is capable of being operated through direct USB cable connection or wirelessly through an OTG compatible android device;
27. Simulator provide a consolidated training report in excel as well as chart form and possible to monitor and collect reports from multiple training sites and email the same from controller.
28. Having facility to create different user/student accounts for accurate data storage and analysis
29. supplied complete with Manikin, laptop controller, operation and reporting software, disposable head bags.

2) Neonatal Resuscitation Simulator

1. The model is suitable for practicing cardiopulmonary resuscitation (CPR) for a neonatal baby.
2. The model look like a real baby without any joint in the lower and upper limbs
3. The model provide thoracic movement by positive pressure ventilation with the help of bag valve mask.
4. The following training is possible using the model:
 - a. Airway management by using laryngeal mask and intubation tube.
 - b. One-sided lung intubation
 - c. Nasal and oral suction.
 - d. Chest compression.
 - e. Umbilical vein catheterization.
 - f. Determination of heart rate by measuring the beat at the base of umbilical cord.
 - g. PICC line insertion
 - h. IV line insertion
 - i. IM injection site in gluteal region, deltoid region and lateral thigh.
 - j. LMA insertion
 - k. Variable rate of respiration
 - l. Pneumothorax
5. The model is made of special silicon rubber and have life like realistic appearance and feel of a human neonatal.
6. The main body is supplied with silicone spray and storage case.

3) Infant Girl Model for nursing Practices

1. The model is of Girl baby.
2. It has seamless configuration made of silicon rubber to produce appearance and texture of real skin.
3. The model is made for practicing bathing, observation and measurement of each part of body, suction, rectal thermometry, umbilicus treatment.
4. It gives the sense of handling like a real baby and is perfectly suited for learning infant handling.
5. The seamless skin is absolutely waterproof.
6. Realistically designed anterior and posterior fontanel, sutura coronalis and sutura sagittalis.
7. The head of the baby is not fixed.
8. It has Flexible ears.
9. An oral opening be from the oral cavity to stomach with more than 15 cm length
10. A nasal opening run approximately 5 cm from the nostrils to the larynx.
11. Arms and legs are freely bent into any position.
12. The umbilical cord is detachable.
13. The anal canal is minimum 4 cm deep.
14. The quality of the silicone skin is not deteriorate with repeated bathing.
15. It allow breast feeding and handling of urine-collecting practice..
16. Bathing (neck, ears and positioning of arms and legs).
17. Overall observation and measurement of each part of the body.
18. Use of diaper
19. Rectal thermometry.
20. Realistic movement including head tilt, chin lift & jaw thrust
21. Interchangeable head in case of repairs
22. Realistic rib structures including xiphoid process & clavicle
23. Palpable landmarks in the 2nd intercostal space midclavicular line & 5th intercostal space mid-axillary line
24. Palpable vertebrae landmarks
25. Lumbar puncture can be practiced at L3-L4 & L4-L5 spine locations
26. Proximal tibia interosseous needle insertion site
27. Realistic anatomy to practice inserting catheter tube to extract urine
28. Optional arm facilitates ultrasound-guided IV & PICC line insertion
29. Fully enclosed fluid management system giving realistic blood flashback & flow
30. Allows needle cannulation at various various locations in hand, arm & foot with realistic blood flashback
31. Lifelike responsiveness during procedure training
32. Set-up time is less than 5 minutes

4) Neonatal Vital Signs Simulator

1. It is an infant simulator which simulates vital signs monitoring the entire body.
2. The simulator reproduce 4 different crying sounds using four different buttons.
3. Trainees are able to check heart and breathing sounds for hands-on training of measurement and monitoring as in actual clinical environment.
4. The unit have extremely realistic texture made up of long life good quality Silicone rubber
5. The model have control box to simulate various parameters.
6. Suitable for Monitoring of the head area (palpation of skull moulding) by locating the anterior fontanel, posterior fontanel, sagittal suture, and coronal suture.
7. It has possibility to use rectal thermometry for temperature measurement of rectum.
8. Auscultation of Vital sign is possible including Heart sounds from 100 to 180 beats/minute and Breath sounds from 30 to 80 breaths/minute
9. It simulate thoraco abdominal breathing and respiration rate to facilitate training in Visual inspection.
10. Simulate sound of crying from the mouth and can be heard from a distance .
11. The heart rate and respiratory rate display digitally over a normal range, and the infant's status can easily be set by turning a rotary dial.
12. There is an external speaker on the control box to make Heart sounds and breathing sound audible to persons in the nearby environment.
13. The sounds are set independently, so the balance can be adjusted to match the status settings.
14. supplied complete with Newborn manikin, Control Box, Thermometer, Baby Clothes, Storage Case

5) Infant Nursing Practice Model

1. It is an average infant female model of 6 - 8 months for the various kinds of practice in infant nursing.

2. It is made of a silicone rubber with soft and realistic skin.
3. Techniques in the handling of a real human infant is taught using this model.
4. This model allows following nursing practices:
 - Feeding baby food
 - Breast feeding
 - Exercising
 - Bathing, washing hair, changing clothes and diapers
 - Overall observation of body such as ocular, aural tapping examination and palpation
 - Suction from nasal and oral cavities
 - Measurement of height, weight, blood pressure and circumference of skull
 - Rectal thermometry
 - Insertion of feeding catheter
5. This model is supplied with an infant manikin with approximately 8 kg in weight and approximately 70 cm in height.

6) Paediatric Patient Care Simulator

1. Model of Seamless Limbs Pediatric patient of about 6 year old infant for practicing during sickness
2. It has seamless upper and lower limbs and is able to be positioned in sitting, and sleeping position as in real patients
3. Capability of practicing airway suction, oral nasal or tracheotomy.
4. Practice of percutaneous Endoscopic Gastrostomy (PEG) care
5. Feeding tube management is possible
6. Catheterization practice of male and female.
7. Manikin size is approximately 125 cm.
8. It is supplied with following complete accessories :-
 - a. Head and neck section
 - b. Male and Female genitalia
 - c. Syringe
 - d. Water bag for catheter
 - e. Strap- on IV venipuncture trainer
 - f. Uniform
 - g. Catheter

7) Paediatric Lumbar Puncture Simulator II

1. Soft seamless baby manikin facilitate training in safe patient positioning and holding.
2. Two types of puncture pads have different spinal cord's depth
3. Realistic resistance to needle tips and anatomically correct landmarks provides excellent hands-on experience.
4. Specifications:
 - baby manikin (7-10 months)
 - pediatric LP blocks (shallow)
 - pediatric LP blocks (deep)
 - irrigation bag
 - stand
 - syringe (50 ml)
 - instruction manual

E. AUDIO VISUAL SYSTEM

Audio system – 1 set -Full Duplex

Audio communication between classroom and central room
Both wired and wireless communication device.

Item 1 : IP IR DOME CAMERA SPECIFICATION:

<u>IP IR DOME CAMERA</u>			
Sl No	Parameters	Minimum Specifications	Bidder Compliance (Yes/No)
1	Video Compression	H.265/ H.264/ M-Jpeg or better	
2	Shutter Time	1 sec. to 1/100,000 sec. or better	
3	Iris	DC-Iris	
4	FOV (Field of View)/Angel	92.7° / 76.4°	
5	Video Resolution (Max.)	2592 × 1944 or better	
6	Frame rate	30 FPS @ all resolution or better	
7	Image Sensor	1/2.7" Progressive Scan CMOS or better	
8	Lens Type	Motorized varifocal zoom with Auto focus	
9	Lens	2.8 to 12 mm	
10	IR	IR with minimum 40 meters range, IR from same Camera OEM as integrated	
11	Multiple Streams	Triple streaming Support, Main Stream : 60Hz: 5MP(1-30fps) / 4MP(1-30fps) / 2K(1-30fps) / 3MP(1-30fps) / 1080P(1-60fps) / 720P(1-30fps) 50Hz: 5MP(1-25fps) / 4MP(1-25fps) / 2K(1-25fps) / 3MP(1-25fps) / 1080P(1-50fps) / 720P(1-25fps)	
12	Minimum Illumination	Color 0.008 Lux @ F1.2, AGC ON; 0 Lux with IR	
13	Auto adjustment + Remote Control of Image settings	video rotation ,time stamp, text overlay, , ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, AGC, SNR >52 dB, flip & mirror, Scheduled profile settings,	
14	Defog	Supported	
15	WDR	True WDR 120dB	
16	Image Quality	BLC / HLC, 3D DNR	
17	Audio Streaming	Full-duplex / half duplex, 1 IN & 1 Out	
18	Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, SMTP, FTP, SNMP, UPnP, ICMP, HTTP,HTTPS, DNS, DDNS, RTP, , 802.1X, QoS, IPv4, IPv6, Bonjour, ARP, Unicast, Multicast, RTCP, IGMP	
19	Security	HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password	
20	Intelligent Video Analytics	Line crossing, region Entering/Exiting/Intrusion, Object Counting, Scene change, video blur and video color cast detection, Face detection and Face capture	
21	Alarm I/O	Minimum 1 Input & 1 Output contact for 3rd part interface	
22	SD Card	Built in SD card slot with support up to 128 GB with Class 10 speed. The camera should have the facility to store the data on local SD card inside the camera in case of network connection.	
23	Operating conditions	-30 °C to +60 °C	

24	Casing	IP-67 rated & IK 10 (casing)	
25	Certification	UL, CE, FCC, BIS, ONVIF profile S, G & T	
26	Power	PoE/12VDC. PoE to follow 802.3 af/at	
27	Network	1 RJ45 10M/100M self-adaptive ethernet port	
28	Operating Humidity	95% or less (non-condensing)	

Item 2 : NETWORK VIDEO RECORDER SPECIFICATION:

VIDEO MANAGEMENT & RECORDING SYSTEM		
Sl No	Feature Description	Bidder Compliance (Yes/No)
1	The Video Management System (VMS) software shall be used to view live and recorded video from capture cards and IP devices connected to local and wide area networks. The VMS software shall have a client/server-based architecture that can be configured as a standalone VMS system with the client software running on the server hardware and/or the client running on any network-connected TCP/IP workstation. Multiple client workstations shall be capable of simultaneously viewing live and/or recorded video from one or more servers. Multiple servers shall also be able to simultaneously provide live and/or recorded video to one or more workstations.	
2	The VMS shall be supplied with minimum 200 nos of thick clients and 15 mobile clients	
3	The Video Management System (VMS) shall be a software package for comprehensive management of live and recorded video, and associated audio and data.	
4	General Functionality - The VMS shall possess the following general characteristics	
4.1	The VMS shall provide effective monitoring of video from IP cameras and encoding devices, two-way audio and data in real time over local and wide area networks	
4.2	The VMS supports interactive and multi-level mapping	
4.3	The single-screen administration across multiple servers and systems, including:	
4.3.1	It shall support global configuration and monitoring of camera, NVR and storage settings across the enterprise network.	
4.3.2	It supports simultaneous administration of all users on multiple servers	
4.3.3	It supports configuration of user authentication using LDAP/Active Directory features of the network	
4.3.4	It supports e-mail and text (SMS) notifications	
4.4	The VMS shall automatically identify and assign IP address to compatible IP cameras and encoders with status display	
4.6	The client software allow remote access to live and recorded video, including access from mobile devices and support simultaneous access to video from multiple servers	
4.7	The VMS should support 2-way audio communication between server, client, and camera	
4.8	Suspect Tracking : Configure camera links between cameras to follow a suspect between different camera scenes	
5	Architecture	
5.1	The VMS shall have a client/server-based architecture that can be configured as a standalone VMS with the client software running with equal functionality on the server hardware and/or the client running on any network-connected TCP/IP workstation.	
5.2	The VMS shall record and retrieve video, audio and alarm data and provide it to the VMS clients upon request.	
5.3	The Client Characteristics will be as per following:	
5.3.1	The Client Software View live video and audio, recorded video and audio and be able to configure the complete system all from a single application.	

5.3.2	The Client Software will have full compatibility with all available features of the VMS server software	
5.3.4	The Client Software shall have Add and remove features based on the permissions of the user and the licensed functionality	
5.4	The Web Client will have following features:	
5.4.1	The Web Client can view Live and Recorded Video	
5.4.2	The Web Client can control Pan-Tilt-Zoom movement for PTZ Cameras	
5.4.3	It can activate triggers	
5.4.4	It can get connected with multiple VMS Servers simultaneously	
5.5	The Mobile Client will have following characteristics:	
5.5.1	The mobile application shall support Apple IOS, Google Android, and Microsoft Windows Mobile operating systems.	
5.5.2	It can remotely view Live and Recorded Video from any Video Server	
5.5.3	It can Control PTZ movement and the monitoring and activation of alarms and events from the mobile device.	
5.5.4	It can monitor events configured by the Client	
5.5.5	The web service supporting the mobile application shall size the video stream to accommodate both low bandwidth and high bandwidth networks.	
5.6	The VMS software shall allow the user to have any combination of VMS client applications running on any of the supported operating systems and be able to connect to any of the VMS servers running on any of the supported operating systems. Hence, Multiple client workstations shall be capable of simultaneously viewing live and/or recorded video from one or more servers.	
5.7	The VMS software shall have the capability to run multiple client applications simultaneously on one workstation with multiple monitors and atleast 12 monitors shall be configurable on a single workstation with one (1) client application running on each monitor.	
5.8	The VMS server software shall have the ability to be installed on an IP edge device—such as an IP camera or encoder that allows for 3rd party applications—allowing the device to serve as both a server and IP video recording device.	
6	Video Streaming	
6.1	Video formats supported: MJPEG, MPEG-4, H.264, H.265	
6.2	Each video stream shall have the ability to be recorded, viewed live, saved to views, exported, and available in search and playback.	
6.3	Streams shall be individually configurable for recording schedules and storage rules	
6.4	Multistreaming – The VMS shall allow the setting of multiple, independent video streams from the IP camera, each configurable for frame rate, resolution and quality level.	
7	Recording	
7.1	The Recording should be continuous, uninterrupted and unattended recording of all video and audio transmitted to the VMS, including during times of administration and configuration of any feature	
7.2	The system shall record video based on metadata generated by an edge network device and included in the video stream sent to the VMS server	
7.3	The system shall allow to configure each video input's recording time on an hourly basis, to further allow the user to schedule when to record on motion, when to record on event and when to not record	
7.4	The video file shall contain the data of the video, audio, and associated metadata.	
7.5	The index file shall contain the index of the metadata from the network device. When the VMS searches for video, it shall retrieve and display the information in the index files.	
7.6	A bookmarking feature shall allow the tagging, naming, and retention of video clips. The VMS shall provide the capability to organize related bookmarks into cases.	
8	Video Archiving	

8.1	The VMS shall provide for the archival of video, audio, and data files, as determined by rules, events, or manual selection. Each archive target has its own set of rules for what cameras and video are archived and when.	
8.2	The VMS shall support CIFS and NFS network shares for archive target locations. It shall be able to archive video to multiple locations and base the archive on camera, event type, or an archive schedule.	
8.3	VMS shall be able to archive continuously or on a scheduled basis like weekly schedule and multiple schedules may be combined to derive specific schedule.	
9	Events	
9.1	The VMS should support following Events	
9.1.1	Video motion, operating on the encoded video	
9.1.2	Video loss of analog video signals	
9.1.3	Device, Server and System Health	
9.1.4	IP camera connection	
9.1.5	Analytics Rule	
9.2	The VMS should support actions on events like Record Video, Output Trigger, Send an E-mail supporting SSL and TLS protocols for encrypted communications	
9.3	The VMS shall call a PTZ Camera Preset as action on events	
9.4	The VMS client shall be configurable to automatically switch views on any event within the event monitoring function.	
10	Search and Playback	
10.1	The VMS can search and play back recorded video, audio and events from VMS servers	
10.2	The VMS shall search and play back video from multiple cameras simultaneously in a synchronized multi-camera layout along with search recorded video based on time, date, video source and image region, with results displayed as both a clickable timeline	
10.3	The VMS shall perform a visual thumbnail search, selecting one image per camera per set time period and can play video from selected image along with zoom in to a time range around selected image	
10.4	The Archived video shall be seamlessly searched during any video search, eliminating the need for a user to separately search the archive location.	
11	Video Information Display	
11.1	The VMS shall have a live display mode, wherein a user shall be able to view live video, live audio, POS data, and alarm information.	
11.2	The VMS client shall be able to use OpenGL and Direct 3D to decompress and render video.	
11.3	The VMS shall allow viewing of cameras in logical groups and preset views.	
11.4	The VMS shall be able to automatically cycle through two or more saved views to create a video tour, with a configurable dwell time for each view.	
11.5	The VMS shall support the use of a panoramic lens on an analog or IP camera. The VMS client shall de-warp the image on both live and recorded video.	
11.6	The VMS shall allow the customization of the user interface to display software (soft) triggers and initiate actions.	
11.7	The VMS shall provide the ability to instantly push selected cameras, layouts, tours, groups or entire views to another exacqVision client monitor, such as a public view monitor or a video wall.	
11.8	The VMS shall support overlay controls shall appear when hovering over a camera in live view : Appearance: text color, font, style, transparency, location Control Types: audio inputs and outputs, alarm outputs, input events, soft triggers, serial data, manual record	
11.9	The VMS shall be able to display the following additional system information: a) users currently logged in to the system b) plug-in file version information number and status c) system log containing a detailed history of system processes	

11.10	The VMS shall support display of notifications to the user for common setup tasks that should be performed, including: a) Configuring motion on all cameras b) Changing the default password c) Configuring email notifications d) Configuring of multistreaming e) Time delta between server and camera	
12	Mapping	
12.1	The VMS shall have a map capability, accessible to users with the appropriate permission levels.	
12.2	The map displayed video sources and their status and also the field of view for cameras on the map using an adjustable FOV visualization triangle	
12.3	The VMS shall support nested or embedded maps	
12.4	The VMS can place, view and activate soft triggers from the MAP	
13	Export	
13.1	The VMS software shall have the capability to export video, maps, POS data and audio files, without overwriting previous exports.	
13.2	Export file formats supported: .AVI, .MOV, .MP4 or .EXE file	
13.3	The VMS standalone player shall be able to authenticate that the video has not been tampered with using a keyed Hash Message Authentication Code (HMAC).	
14	Administration & Configuration	
14.1	The VMS system can authenticate the User's Permission by Active Directory or LDAP	
14.2	The VMS system can allow for a user's permissions to be configured across multiple servers from a single screen	
14.3	The VMS system shall record an audit trail of when users log in that shows what changes they have made, what video they have viewed and what they have exported	
14.4	The VMS software shall provide a configuration option to require 2 users enter unique passwords to authorize tasks involving the viewing of video.	
15	Reporting	
15.1	The VMS provides color coded status of servers, cameras, and unacknowledged events in the following categories in list or chart format:	
15.1.2	Critical as 1) server or camera device not detected and 2) event occurring and unacknowledged	
15.1.3	Warning as 1) Health warning on server (such as temperature, storage alarm, archive alarm, CPU fan), 2) Server license subscription expiring soon, 3) Event unacknowledged but open, 4) Event unacknowledged but closed	
15.1.4	Normal as 1) Server or camera connected and operating and 2) Event acknowledged and closed	
15.1.5	The VMS shall allow creation of Reports to a. view and manage a list of unacknowledged events, b. view a list of open events and c. search for specific events based on various criteria	
16	Network Video Recorder - Specification	
16.1	CPU : Gen 7 Intel® Celeron or better	
16.2	Network Video Recorder supporting 20Ch IP cameras	
16.3	RAM : 4 GB or better	
16.4	OS Drive : 128 SSD or better	
16.5	HDD Storage : Up to 12TB inbuilt	
16.6	Operating System : Microsoft Windows 10 or Ubuntu Linux 18.04	
16.7	Video Storage rate: 100 Mbps or better.	
16.8	NIC : 2 x 1 Gbps	
16.9	USB Port : 6 (2 Front, 4 Rear)	
16.10	Regulatory Approvals : UL, CUL (US listed), CE, FCC	

Item 3: Computer :

SL No	Description	QTY
1	Client Workstation :- Processor intel core i7, Windows 10, System Memory (RAM): 16 GB, Network interface, Human Interface: keyboard and a mouse, Port:- USB, VGA, HDMI,, Ethernet port., Graphics Card with 17" Monitor	1

Item 4 : 4U Rack with Power distribution Unit .

SL No	Description	QTY
1	4Ux Rack for switches & accessories Make: VAL Rack/APW/ RITTAL/WQ	1

Item 5: 16 Port Poe Switch

SL No	Description	QTY
1	Layer 2 Managed Switch(Gigabit) 16 port PoE+ Make: :Cisco/Extreme/Tejas/juniper	1

Item 6: 8 Port Switch

SL No	Description	QTY
1	Layer 2 Managed Switch(Gigabit) 8 port Make: :Cisco/Extreme/Tejas/juniper	1

Bill of Materials:

SL No	Description	QTY
1	IP IR Dome Camera	7
2	Network Video Recorder	1
3	16 Port Poe Switch	1
4	8Port switch	1
5	Cat 6 Cable	2 Box (305 Mtr Roll)
6	Computer Table	1
7	Computer	1
8	4U Rack	1
9	RJ 45 Connector	50
10	PVC conduit	250 mtr

Classroom AV System		
Sl. No.	Description	Qty
1	SITC of 75 inch LED Professional Display Resolution: 3840*2160 (4K UHD) Brightness: 350 nit Contrast Ratio: 4000:1 Viewing Angel(H/V): 178 / 178 Response Time: 8 ms Operation Hour: 16 /7 Haze: 2% Built in Speaker: 10W +10W Input: DVI-D, HDMI 2.0 (2), HDCP 2.2, Stereo Mini Jack, USB 2.0 x2 External Control: RS232(in/out), RJ45 Processor: Coretex A72 1.7GHz Quad-Core CPU Storage: 8GB Multimedia: MPEG-1/2/4. H.263, H.264/AVC,UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, MPEG Operating System: Tizen 4.0 (VDLinux) Accessories: Quick Setup Guide, Power Cord, Remote Controller, Batteries. with Digital Signage License.	1
2	SITC of Video Conferencing Camera Field of view: Horizontal: 180 degree/ Vertical 180 degree Number of Camera: 3 Light Control: Brightness, Contrast, Saturation, Sharpness and White Balance Stitching Technology: Dynamic real-time stitching Supported Resolution: Panoramic-4K(3840X1080 @ 30 fps) 1080 Full HD: 1920 X 1080 @ 30 fps 720p HD: 1280 x 720 @ 30 fps 2 buil-in microphone Camera Control: Electronic Pan-Tilt-Zoom (ePTZ) USB C-Port Powered by USB 3.0cable System Requirement: Windows 7 or above macOS X 10.9 or above Linux Ubuntu 16.x or above Chrome OS	1
3	SITC of Speakerphone for Video Conferencing Peak output power: 10 Watt Microphone Type: Omni-directional SNR: + 70 dB Connectivity: USB 2.0 & Bluetooth Wireless Range: Up to 30 m Talk Time: Up to 15 Hours Charging Power & Time: USB 5V/500 mA- Charging time 3h	1
4	SITC of e-Podium: System Body: 1. Top should be MDF or Metal and Metallic Body should be minimum 2mm Metal / steel sheet 2. The system should have a Top Sliding Mechanism and should be Metal / steel / MFD 3. Provision for Monitor which should be electrically adjustable with the help of Switch 4. Document Camera Tray with integrated wheel for eazy movement. Touch Screen Monitor: 1. The system should consist of 21.5" wide LED Touch Screen Monitor or higher 2. The monitor should be LED backlit.	1

	3. The monitor should have a native resolution of 1920 x 1080 4. The monitor should come with a USB port for PC Connection. 5. The monitor should have a 15 Pin HD ports or DVI Input port. 6. The monitor should support Win 7 or higher. 7. The monitor should have an Electromagnetic Sensor Method. 8. Contrase ratio: 1000:1 9. Response time minimum 5ms System Controller: 1. 10/100 Mbps, Full / Half Duplex, IPV4 2. Controller should have Total 1 dedicated RS-232 Port 3. The controller should have Relay Switch Port for Screen Up/Screen Down (2 Nos) 4. The system should have Type Buttonpad with Buttons for VGA, HDMI, PC, Visualiser, Screen up/ Screen Down, Projector Lift up, Projector Lift Down, MicMute/Unmute, Volume Mute/Unmute, Volume Up/Down 5. The control pad should have RS-232 port Gooseneck Microphone: 1. The Microphone should have a frequency response of 40 Hz to 20,000 Hz or better. 2. The Microphone should have a Cardioids Polar Pattern. 3. The Microphone should come up with standard 3 PIN XLR Connector. 4. The Cartridge should be a 20mm Condenser Wireless Handheld & Lapel Microphone: 1. The microphone should have a ± 10ppm Frequency Stability. 2. The microphone should have a Auto Scan Receive Mode. 3. The Microphone should have a frequency response of 50Hz to 18000 Hz or better. 4. 2 no. of wireless Lapel Microphone, 2 no. Handled Microphone should be supplied along with podium Amplifier: 1. The Amplifier should consist of a 100 Watts (50 WattsX2) at 4 Ohms. 2. The Amplifier should have S/N Ratio of >80dB. DSP: 1. The DSP should have a 100% Full Duplex Echo Cancelling – no attenuation during full-duplex. 2. It should have an Acoustic Echo Cancelling 3. The processor should have a Noise Reduction 4. It should have delay of 10msec or better 5. USB voice interface (for audio input & output) X 1 or more 6. XLR Balance In X 2(individual gain control) or more; Aux port X 1 or more; Amplifier L/R speaker out X 2 or more & Mix out or more 7. This should be a Virtual Training Podium wherein, the DSP would enable the local reinforcement through wall mount speakers of the Gooseneck Microphone, Wireless lapel microphone and Wireless Handheld Microphone and the same Microphone input should also travel over Video Conference to remote locations without any echo & noise in the same. Notebook or Laptop Interface: 1. The system should consist of the atleast following ports on the interface with integrated Switcher having following Ports VGA port, HDMI Port, Audio port, 4 USB Ports, Power Outlet. It should come with integrated button pad controller to switch between HDMI , VGA and USB Ports. It shall have HD video inputs for CPU, 2x Laptop Inputs, Visualiser or more. Hydraulic Lift for the Touch Display: 1. Podium should be supplied with an Automatic Hydraulic Lift Mechanism for the Touch Display wherein with the help of 1 button, three purposes can be fulfilled - Screen UP, Screen Down & Pause Screen at the desired angle.	
5	SITC of Wall Mount Speakers: The System should be supplied with 2 Wall Mount Speakers. The Speakers should come with 5 Inches woofer and 1 inch or more tweeter. The Speaker should be 30 Watts or more . The speaker should have a maximum SPL of 88dB or more.	2

6	SITC of Portable Document Camera/ Visualizer: 1. 2x Sensor Zoom 2. 12x Digital Zoom 3. HDMI Output 4. Inbuilt storage of minimum 100 images 5. Inbuilt microphone for audio video recording	1
7	Necessary Cables and Connectors	1

- The OEM for IP Cameras & VMS should have a registered entity and direct presence (Including parent company, Group Company, subsidiary, joint venture or sister concern of any type) not in India for more than 5 years as on bid submission date.
- The OEM for IP Cameras & VMS must have a self-owned (not as joint venture, partnership firms or through any other association) service/support and RMA centre in India for at least 5 years prior to bid submission date.
- OEM (Including parent company, Group Company, subsidiary, joint venture or sister concern of any type) should have never been black listed / banned /removed from any govt. /PSU / Consulates in India or abroad. Declaration to be submitted duly signed by the Head/Director/CEO of OEM.
- The OEM for IP Cameras & VMS should have at least 25 employees on its payroll in India. Declaration letter from the HR/country Head/Director/CEO of OEM to be submitted along with the bid.
- The Camera OEM should have supplied minimum 200 cameras with associated recording and storage solution (as required in this tender) in single project. Suitable evidence document to be submitted with bid.

**Seal and Signature of the Firm
with Address, Tel. No., Cell No.**

Date :

N.B. : Each page should be sealed and signed by the Bidder.

3.0 Technical Bid (Submission Format):

The Scanned copies of the following Mandatory documents to be uploaded on e-Tendering Portal in the following format :

Annexure - 1

Sl no.	Details / Particulars	Uploaded (Yes/No)	Page No
A	(To be Mentioned in the Letter head of the Firm). 1. Name & Address of Bidder with phone number, email-id. 2. Specify whether a Proprietorship / Partnership firm/ Company 3. Name of Proprietor /Partner/Managing Director/Director.		
B	Name, address & designation of the authorized person for signing the bid documents. (Authorization should be made in Letter head of the Organisation by its competent person(s)/ Board of members)		
C	Whether you have fully trained technical staff for installation/commissioning of the Equipment/Models and efficient after sales services? If yes, Name, Address, Phone & Fax No. of Service Centre at Bhubaneswar or nearby, if any.		
D	PAN No. (enclose the self attested copy of PAN Card)		
E	GST No. (enclose GST Registration Certificate of the firm)		
F	Income Tax Return for the last Three years. (Note: The condition of prior turnover and prior experience may be relaxed for Startups (as defined by Department of Industrial Policy and Promotion) subject to meeting of quality and technical specifications.)		
G	Annual Turn Over for last Three Financial Years (Duly signed by Chartered Accountant) (Note: The condition of prior turnover and prior experience may be relaxed for Startups (as defined by Department of Industrial Policy and Promotion) subject to meeting of quality and technical specifications.)		
H	Bid Security Declaration in lieu of EMD as per given format in the tender document	NA	
I	Firms registered with NSIC for Sale of Medical Equipment/ Instrument/Apparatus and are claiming exemption for submission of EMD (subject to the financial limits indicated in the NSIC certificate) must enclose copy of NSIC Certificate in full.		
J	Whether the firm is a Registered firm under MSME or SSI . MSME registered bidders are to mention UAM (Udyog Aadhar Memorandum) number issued by MSME. Whether declaration of UAM number by the bidder on CPPP has been made or not. (attach copy of such certificate(s) in full).		
K	Undertaking for acceptance of all Terms & Conditions in original (Annexure-I).		
L	Notarised affidavit as per Annexure –II on Indian Non Judicial Stamp Paper of Rs.10/-. (If you don't submit this, your tender will be out rightly rejected.)		
M	Manufacturers' Authorisation form as per Annexure – III (Undertaking by manufacturer of equipment for servicing the equipment & supply of spare parts & labour whenever required for a period of 7 years i.e., 5 years warranty & 2 years CMC period.)		

Sl no.	Details / Particulars	Uploaded (Yes/No)	Page No
N	Whether the items quoted is as per specification, if not, the statement of deviation (Parameter wise) from the tender technical specification must be enclosed as per Annexure-IV .		
O	Have you previously supplied these items to any government / reputed private organization? If yes, to list Major Customers to be given on a separate sheet as per Annexure – V . (PO copies of similar item supplied must be enclosed.)		
P	The Procurement of goods and services under this tender will be regulated as per the applicable provision of Public Procurement (Preference to Make in India), order 2017 of MoC&I (DIPP), Govt. of India. The condition of prior turnover and prior experience may be relaxed for Startups (as defined by Department of Industrial Policy and Promotion) subject to meeting of quality and technical specifications. Therefore, bidders who are claiming to be regulated under the said order are to submit documentary evidence in support of their claim.		
Q	Financial Bid as per Annexure – VI (Note: Annexure -VI & VII to be submitted on line only)		----
R	Post- Warranty CMC charges for 2 years in the Financial Bid		----
S	Literatures/ catalogue pertaining to technical details, makes/brands of the equipment with specification, whether indigenous or imported with name of manufacturer & address must be enclosed.		----
T	Manual Submission of Documents		
U	Bank Details : 1. Beneficiary Name : 2. Bank Name : 3. Account No : 4. IFSC Code : 5. Branch Address :		----
V	Any other information, if necessary		

Annexure-2

Sr. No.	Pre-Qualification Criteria	Supporting Documents	Page No.
1	Vendor should be an Indian Company, registered under the Companies Act 1956/2013 OR a registered Partnership Firm	Certificate of Incorporation along with Memorandum & Article of Association/ Partnership deed.	
2	It is not a loss-making entity - the Vendor should have been making profit aggregated over the last three financial years 2017-18, 2018-19 & 2019-20	Copy of audited financial Statements including P & L account for last 3 financial years.	
3	Vendor should have achieved minimum Annual turnover of Rs 5.00 Crores during the last three Financial Years, i.e. 2017-2018, 2018-19 & 2019-20.	Copy of audited financial Statements for last 3 financial years. Certificate from CA for revenue from Infrastructure Provisioning business.	

4	Vendor must have valid Registration Certificate under Shops & Establishments Act	Copy of valid Registration Certificate.	
5	Vendor must have valid certificate for ISO 9001, 27001	Copy of ISO 9001 / 27001 Certificate.	
6	The Vendor shall submit a self-declaration for being not under legal action for corrupt or fraudulent practices (blacklisted) by any Ministry/ Department of Govt/ State / UT Government/ Government Organizations in last 3 years as on 31 st March, 2020 & current year.	Self-Attested Declaration on company letter-head signed by Authorized Signatory.	
7	The Vendor should be registered with GST and carry a valid GST no., PAN Number.	Copy of the certificate of GST, PAN.	
8	Letter of Authorization to sign the bid/ contract by Managing Director or Board.	Original copy should be signed On Company letter head.	
9	If the Vendor is an authorized dealer/ distributor of any manufacturer of equipment.	Copy of authorization letter from OEM as appended below.	

CHAPTER – III

5.0 GENERAL TERMS AND CONDITIONS :

- 5.1** The validity of the Bid Tender Document shall be for 180 days from the date of opening of the bid.
- 5.2** Tenders should be quoted only by the original manufacturer (OEM) or their authorized distributor or selling agent, who shall submit a current authority letter in support of the same from the original manufacturer(OEM) concerned in the format given at “Annexure-III”.
- Bidders are required to quote strictly as per specifications of the items. Deviation if any to specification, must be brought out clearly giving deviation statement as per Annexure-IV. Additional features if any, should be listed separately in the offer.
- 5.3** The model of the item offered should be brand new and should not be refurbished or obsolete, out of production for at least 10 years from the date of installation and commissioning of the items.
- 5.4** The Equipment/Accessories/Apparatus/ Models supplied to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained/ mentioned in the clauses hereof. The purchaser will be entitled to reject the said Equipment/ Accessories/ Apparatus/ articles or such portion thereof as may be discovered not to conform to the said description and quality.
- 5.5** The Bidder should state categorically whether they have fully trained technical staff for installation/commissioning of the Equipment and efficient after sales services.
- 5.6** Qualified Bidders are required to arrange a demonstration of the items, if required by evaluation committee.
- 5.7 60 Months Onsite Warranty including Spare Parts & Labour etc. and CMC for 2 (two) Years :**
- 5.7.1** It should ensure that the equipment being offered is the latest model as per the specifications and the spares for the equipment to be available for a period of 5 years after the warranty / guarantee period.
- 5.7.2** The firm shall quote for CMC charges for the next 2 years after expiry of the comprehensive warranty period of 5 years.
- 5.7.3** *The supplier will guarantee One visit of technical support staff every three months (4 visits in a year) for periodic/preventive maintenance and any time for attending repairs /breakdown calls.*
- 5.7.4** The manufacturer should also give warranty/guarantee that will keep the institute informed of any up-date of the equipment over a period of next 10 years from the date of Installation & Commissioning of the equipment and undertake to provide the same to the institute at no extra cost.
- 5.7.5** The supplier further warrants that the items/Stores supplied under the contract shall have no defect arising from design, materials (except when the design adopted and/ or the material used are as per the AIIMS, Bhubaneswar specifications) or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied Equipment under the conditions prevailing in India.
- 5.7.6** Replacement and repair will be undertaken for the defective Equipment at no extra cost. Proper marking has to be made for all spares for identification.
- 5.7.7** Conditional warranty like mishandling, manufacturing defects etc. is not acceptable.
- 5.8.1** The firm will be required to guarantee that the equipment including the accessories will be maintained in good working condition for a period of 347 days out of a period of 365 days (i.e. 95% uptime on yearly basis throughout the warranty period as well as during the service contract period).

- 5.8.2 If the equipment is out of order for more than 5 hours during any day, it shall be considered as one day down time. The essential period to shut down the installation entirely or partially should also be included in the down time if it exceeds 2 days while calculating the 95% guaranteed uptime.
- 5.8.3 Upon receipt of notice from the buyer, the supplier shall, within 48 hours on a 24 X 7 X 365 basis respond to take action to repair or replace the defective Equipment/Accessories or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/accessories/stores after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/accessories/stores thereafter. The penalty clause for non-replacement will be applicable as per tender conditions.
- 5.8.4 If the supplier, having been notified, fails to respond to take action to replace the defect(s) within 48 hours on a 24 X 7 X 365 basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 5.8.5 The firm will be required to pay a penalty of Rs. 500/-(Rupees Five Hundred only) per day for per unit in case the number of days of down time in each period of 365 days is more than the downtime permissible which is to be calculated as defined above and the delay for not bringing the equipment in functioning order is in any way directly, even partially, attributable to the supplier OR the warranty period will be extended by the vendor for every days of delay occurred.
- 5.9 The Supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and Equipment supplied by them to the purchaser for 7 years from the date of installation and handing over. The vendor should move the CMC proposal before expiry of Warranty period. If the vendor fails to execute the CMC agreement, will have to face penal action/ penalty as may be decided by the competent authority.
- 5.10 **Fall Clause:** If at any time during the execution of the contract, the Manufacture/Distributor/Dealer reduces the sale price or sells or offers to sell such equipment, as are covered under the contract, to any person/organization including the purchaser or any department of Central Government or any department of AIIMS Bhubaneswar/ other INI /PSUs at a price lower than the price chargeable under the contract during the Currency of the contract, they will forthwith notify AIIMS, Bhubaneswar. The difference in cost due to such reduction or sale or offer of sale would be refunded by the bidder to AIIMS Bhubaneswar, if the contract has already been concluded or AIIMS Bhubaneswar will deduct from the pending bills/Performance Security Deposit to recover the loss to the Government.
- 5.11 DELIVERY OF THE EQUIPMENT/ ACCESSORIES/APPARATUS:**
- 5.11.1 The Delivery of Equipment/Instruments/Accessories/Apparatus should be made in good condition at the Central Stores, AIIMS, Bhubaneswar campus or place indicated in the Supply Order by the bidder at their own cost. AIIMS Bhubaneswar is not liable for payments on account of Packing & Forwarding charges, Freight, Insurance and other incidental charges.
- 5.11.2 The firm will be bound to Supply, Install & Commission the Equipment within 90 days from the date of PO/SO. Thereafter suitable action as deemed fit, will be initiated. The hospital will recover the general damages or extra expenditure incurred in the risk purchase at the risk and cost of bidder and amount paid in excess shall be deducted from their pending bills. The above shall be in addition to forfeiture of Bid Security and black listing of the firm depending upon the circumstances of the default/merit of the case.
- 5.11.3 If the supplier fails to deliver the goods on or before the stipulated date, then Late Delivery charges at the rate of 0.5% per week or part thereof shall be levied subject to maximum of 10% of the total order value exceeding

3 days from the stipulated date. (Excluding the date of issue of Supply Order / acceptance letter and date of delivery). Purchaser may also resort to termination of the Supply Order & even Tender at any time after expiry of the allowable period for supply of the materials.

5.11.4 Part/Partial supply will not be accepted. For any part/partial supply, the total quantity should be completed within given delivery period. However, Part Billing is strictly prohibited.

5.11.5 The firm shall supply the equipment with proper packing and marking for transit so as to be received at destination free from any loss or damage.

5.12 Option clause: The purchaser retains the right to place orders for additional quantity up to 25-30% of the originally contracted quantity at the same rate and terms of the contract during the currency of the contract.

5.13 The Director, AIIMS Bhubaneswar has full authority to take into account the performance of manufacturer/authorized dealer or distributor/bidder and they should submit latest performance certificate from any other Govt. Hospitals/ Institutions/PSUs to testify the proper dealing & performance as well as installation and maintenance of equipment.

5.14 INSPECTION OF SUPPLIES:-

Inspection will be done by the duly constituted committee members nominated by Director, AIIMS Bhubaneswar and or his authorized representatives in AIIMS Bhubaneswar premises at designated place.

5.15 PAYMENTS :

- 70% payment of the total order value shall be released after the successful Installation & Commissioning of the ordered equipment against submission of the Installation & Commissioning Report & on furnishing of Performance Security & execution of Contract Agreement.
- Balance 30% of the order value shall be released after one month of successful installation & Commissioning of the equipment and basing upon the Report of Satisfactory Functioning to be furnished by the user department of AIIMS, Bhubaneswar.
- For processing the payment, the supplier has to submit three copies of Invoice along with receipted challan copy, Installation Report duly counter signed by the user department and other relevant papers like Lorry Receipts etc.

5.16 PERFORMANCE SECURITY DEPOSIT:-

5.16.1 The successful Bidder will be liable to deposit 3% of value of the Contract / Purchase Order as Performance Security Deposit in favour of "AIIMS Bhubaneswar" by way of "Irrevocable Performance Bank Guarantee" or FDR (duly endorsed in favour of AIIMS Bhubaneswar) from a nationalized /Commercial Bank. These instruments are subject to verification from issuing bank before its acceptance by the authorities.

5.16.2 The Performance Security should be valid for 62 months from date of installation, which is refundable after 2 months of expiry of the contract/warranty period of 5 (Five) years subject to successful fulfilment of terms and conditions and on receipt of requisite No Dues Certificate from the concerned Departments/ authorities.

5.16.3 The Security Deposit is liable to be forfeited if the bidder withdraws or impairs or derogates the bid in any respect.

5.16.4 For 2 years CMC, after expiry of warranty period, CMC Security Deposit equivalent to 2.5% of Cost/Value of Equipment shall require to be deposited by the Bidder to AIIMS Bhubaneswar.

5.17 DISPUTES AND ARBITRATION:-

All disputes or differences arising during the execution of the contract shall be resolved by the mutual discussion, failing which the matter will be referred to an Arbitrator who will be appointed by the Director, AIIMS Bhubaneswar for arbitration for settlement of disputes in accordance with Arbitration & Conciliation Act 1996 or its subsequent amendment, whose decision shall be binding on the contracting parties.

5.18 LAW GOVERNING THE CONTRACT AND JURISDICTION.

The contract shall be governed under Indian Contract Act 1872 and instructions thereon from the government of India. The Court of Bhubaneswar shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.

5.19 POWER TO IGNORE MINOR DEVIATIONS:

AIIMS Bhubaneswar reserves right to ignore any trivial nature of deviation(s) in tender documents as decided by the competent authority while processing the tender. The Institute may also seek any clarification/ documents to substantiate the claim of the bidder at the later stage if felt necessary. However, the bidder can't claim it as a matter of right and will be bound to comply the Terms & Conditions of the tender without citing the ground of trivial deviation/ seeking of the clarification/ documents in support of the cancellation of his/ her bid.

5.20 OTHERS:-

5.20.1 After due evaluation of the bid, Institute will award the contract to the responsive Bidder who has quoted the lowest price of the Equipment including CMC charges for 2 years.

5.20.2 At the time of awarding the contract, the tendered quantity can be increased or decreased by 25-30 per cent for ordering if so warranted.

5.20.3 The Bidder shall not be allowed to transfer, assign, pledge or sub-contract its rights and liabilities under this contract to any other agency/ies without prior written consent of the Director, AIIMS Bhubaneswar. If it is found that the firm has given sub-contract to another Agency, the contract shall stand cancelled & the performance security deposit of such Bidder shall be forfeited by AIIMS Bhubaneswar.

5.20.4 The AIIMS Bhubaneswar shall not be responsible for any financial loss or other damage or injury to any item or person deployed/supplied by the Supplier Agency during the course of their performing the duties to this office in connection with purchase order/supply order for supplying/installation/ commissioning of ordered Equipment/ Accessories/ Items at AIIMS Bhubaneswar.

5.21 Debarment from bidding.

- (i) A bidder shall be debarred if he has been convicted of an offence-
 - (a) under the Prevention of Corruption Act, 1988; or
 - (b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.
- (ii) A bidder debarred under sub-section (i) or any successor of the bidder, shall not be eligible to participate in a procurement process of any procuring entity for a period not exceeding three years commencing from the date of debarment. Department of Commerce (DGS&D) will maintain such list which will also be displayed on the website of DGS&D as well as Central Public Procurement Portal.
- (iii) A procuring entity may debar a bidder or any of its successors, from participating in any procurement process undertaken by it, for a period not exceeding two years, if it determines that the bidder has breached the code of integrity. The Ministry/Department will maintain such list which will also be displayed on their website.
- (iv) The bidder shall not be debarred unless such bidder has been given a reasonable opportunity to represent against such debarment.

5.22 Code of Integrity:

No official of the bidder shall act in contravention of the codes which includes

- (i) Prohibition of

- (a) making offer, solicitation or acceptance of bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or other wise to influence the procurement process.
- (b) any omission, or misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.
- (c) any collusion, bid rigging or anticompetitive behaviour that may impair the transparency, fairness and the progress of the procurement process.
- (d) improper use of information provided by the procuring entity to the bidder with an intent to gain unfair advantage in the procurement process or for personal gain.
- (e) any financial or business transactions between the bidder and any official of the procuring entity related to tender or execution process of contract; which can affect the decision of the procuring entity directly or indirectly.
- (f) any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
- (g) obstruction of any investigation or auditing of a procurement process.
- (h) making false declaration or providing false information for participation in a tender process or to secure a contract;
- (ii) Disclosure of conflict of interest.
- (iii) Disclosure by the bidder of any previous transgressions made in respect of the provisions of sub-clause with any entity in any country during the last three years or of being debarred by any other procuring entity.

5.23 The purchaser will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question.

5.24 The Director, AIIMS Bhubaneswar (Odisha, India) has the full and exclusive right to accept or reject, increase or decrease the order quantity, any or all the terms of the tender without assigning any reasons thereof and also to cancel the supply at any time without assigning any reason.

Seal & Signature of Bidder

List of Annexures to be enclosed :

Sn	Particulars	Annexures	Page No.

Sr. Procurement-cum Store Officer
AIIMS, Bhubaneswar

Annexure-I

Name of the E-Tender : Supply, Installation & Commissioning of *Regional Simulation Lab* at AIIMS, Bhubaneswar.

UNDERTAKING

FOR COMPLIANCE OF ALL TERMS & CONDITIONS MENTIONED IN THIS TENDER DOCUMENT

To

**The Director,
AIIMS Bhubaneswar,**

Sir / Madam,

1. The undersigned certify that I/we have gone through the entire tender documents including terms and conditions mentioned in the tender document and undertake to comply with them. I have no objection for any of the content of the tender document and I undertake not to submit any complaint/ representation against the tender document after submission date and time of the tender. The rates quoted by me/us are valid and binding on me/us for acceptance till the validity of tender.
2. I/We undersigned hereby bind myself/ourselves to ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHUBANESWAR, ODISHA-751019 to supply the approved awarded Equipment/Instruments/Apparatus/items in the approved prices to AIIMS Bhubaneswar.
3. The Equipment/Instruments/Apparatus/Models shall be brand new, of the best quality and of the kind as per the requirement of the institution. The decision of the Director, AIIMS Bhubaneswar, India (herein after called the said officer) as regard to the quality and kind of article shall be final and binding on me/us.
4. I/We undertake to arrange for a demonstration of the Equipment /Instruments / Apparatus, if required. Failure to arrange for a demonstration on the given date may lead to cancellation of our bid. Cost of such demonstration shall be borne by me/us.
5. I/We hereby undertake to supply the Equipment during the validity of tender as per directions given in supply order within stipulated period positively.
6. I/We undertake that the items supplied are as per Make/ Model /Catalogue/ technical literature description.
7. If I/We fail to supply the Equipment in stipulated period, necessary action can be taken by the Director, AIIMS Bhubaneswar who has full power to compound or forfeit the Bid Security/ Security deposit.
8. If it is deemed necessary to change any article on being found of inferior quality, it shall be replaced by me/us free of cost in time to prevent inconvenience.
9. Performance security of 30% of the cost of the supply value shall be deposited by me/us in the form of FDR/ Irrevocable Bank Guarantee in favour of All India Institute of Medical Sciences, Bhubaneswar on award of the contract from a Nationalised / Commercial Bank and shall remain in the custody of the Director, AIIMS BBSR till the validity of the warranty period plus two month (i.e. valid for 62 months) from the date of installation.

10. I/We declare that no legal/financial irregularities are pending against the proprietor Partner/Director of the tendering firm or manufacturer.
11. I/we do hereby confirm that the prices/rates quoted are fixed and are at par with the prices quoted by me/us to any other Government of India/Govt. Hospitals/Medical Institutions/PSUs. I/we also offer to supply the Equipment at the prices and rates not exceeding those mentioned in the Financial Bid.
12. I/We undertake that if the rates of any items are lowered due to any reason, I will charge the lower rates.
13. I/We undertake to supply the all Literature (Log Book/ Maintenance Record/ Troubleshooting / Operation Manuals etc.) supplied with each Equipment by Principal Manufacturer in Original to AIIMS Bhubaneswar.
14. I/we have necessary infrastructure for the maintenance of the equipment and will provide all accessories/spares as and when required during warranty period as well as CMC period.
15. I/we undertake to get the Equipment repaired within 48 hours of the receiving of the complaint from the AIIMS Bhubaneswar, failing which a penalty at the rate of Rs.500/- per day shall be deducted from pending bill/ Performance Bank Guarantee before releasing the same to us after 62 (Sixty Two) months.
16. I pledge and solemnly affirm that the information submitted in tender documents is true to the best of my knowledge and belief. I further pledge and solemnly affirm that nothing has been concealed by me and if anything adverse comes to the notice of purchaser during the validity of tender period, the Director, All India Institute of Medical Sciences, Bhubaneswar (India) will have full authority to take appropriate action as he/she may deem fit.
17. I/We have gone through the Terms & Conditions as stipulated in the tender enquiry document and confirm to accept and abide by the same.
18. The quoted rates are inclusive of packing & forwarding charges, insurance, freight and other incidental charges payable up to AIIMS Bhubaneswar site and cost involved for maintenance of the equipment including spares & labour charges for 5 year warranty period. No other charges would be payable by the Institute.
19. That I/We shall supply the equipment/ instruments of requisite quality.
20. That the equipment will be delivered within 90 days from date of Supply Order and as per conditions of GTC.
21. Onsite unconditional Warranty: 05 (Five) years from date of successful installation & commissioning of equipment.
22. CMC : 02 (Two) years from expiry of warranty. (The proposal for CMC should come from the bidder before completion of warranty period.)
23. That I/We undertake that we will provide full technical assistance for a period of one year for upkeep and maintenance of Simulation Lab without any fail.

Signature of Bidder
With seal of firm
(Name of Bidder)

Place

Date.....

Name of the E-Tender: Supply, Installation & Commissioning of (equipment) at AIIMS, Bhubaneswar.

CRIMINAL LIABILITY UNDERTAKING

(To be executed on Rs.10/-Non-judicial Stamp Paper duly attested by Public Notary)

I.....S/o.....

Resident of

.....

do solemnly pledge and affirm that,

1. I am the Proprietor/Partner/Director /authorized signatory of
M/s.
2. No police case and/or case by CBI/FEMA/Income Tax/ Sales Tax authorities are pending against the
Proprietor / Partner /Director of the firm/ company (Agency) and also against the firm/ company.
(Indicate any convictions if any against the above persons or Firm/ Company.)
3. The Proprietor / Partner /Director of the firm/ company (Agency) and also the firm/ company has
never been blacklisted by any Government authority/ organisation.
4. I/We have not quoted the price higher than previously supplied to any Government Institute / Organisation
/ reputed Private Organisation or DGS&D rate in recent past.

Signature

(Name)

Seal of the participating Bidder Company

Affirmation/Verification
By Notary Public

Manufacturers' Authorisation Form

(The Bidder shall require the manufacturer to fill in this form in accordance with the instructions indicated. This letter of authorisation should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.)

Date : ***Insert date (as day, month and year)*** of Bid Submission

Tender No. : ***(Insert number from Invitation for Bids.)***

To

The Director

AIIMS Bhubaneswar

Sijua, Odisha, India

WHEREAS

We ***(Insert Complete name of Manufacturer)***, who are official manufacturer in ***(Insert type of goods manufactured)***, having factories at ***(insert full address of Manufacturer's Factories)***, do hereby authorise ***(insert Complete Name of Bidder)*** to submit a bid the purpose of which is to provide the following equipment, manufactured by us (***insert name and or brief description of the equipments***), and to subsequently negotiate and sign the contract.

We accept the Warranty / Guarantee condition mentioned in the tender documents of AIIMS Bhubaneswar.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent including availability of spare parts & consumables for the period of 10 years for supplied equipment to AIIMS Bhubaneswar.

Signed : ***(insert signature of authorised representative of the manufacturer)***

Name : ***(insert complete name of authorised representative of the manufacturer)***

Duly authorised to sign this authorisation of behalf of: ***(insert complete name of Manufacturer)***

Date on _____ day of _____, _____ ***(insert date of signing)***

Deviation Statement Form

1. The following are the particulars of deviations from the requirements of the tender Specifications.

Specification	Deviations	Remarks (including Justification)

Place :

Date :

Signature and seal of the
Manufacturer/Bidder

Note :

- 1) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating “ No Deviations”

Performance Statement Form

Name of the Firm

Sl No.	Order placed by (Full address of Purchaser)	Order No. & date	Value of order (Equipment)	Have the items been installed & commissioned satisfactorily (Yes/No)

Signature and seal of the manufacturer / Bidder

Place :

Date :

Note : Documents to be attached in support of the above (i.e., recent PO copies for supply of similar equipment to other AIIMS/ INI/ PSU).

Tender on _____

Declaration for Bid Security

To
The Director
AIIMS Bhubaneswar
Sijua, Patrapada
Bhubaneswar – 751 019

Dear Madam/Sir,

I/We Mr./Ms. _____ authorized person to sign the bid document for Tender for Supply, Installation & Commissioning of Regional Simulation Lab do here by declare that I/we have gone through the entire tender documents including terms and conditions mentioned in the tender document and undertake to comply with them.

I/We further declare that we will not withdraw our bid or modify our offer during the period of validity of the bid after the deadline for submission of such documents.

If we withdraw or modify the bids during the period of validity, or if we are awarded the contract and fail to sign the contract, or to submit a performance security before the deadline as defined in the tender document/ LoA, we will be suspended for the period of time specified in the debarment clause in tender document from being eligible to submit Bids/Proposals for contracts with AIIMS Bhubaneswar.

Signature of Bidder

With seal of firm

Form of Performance Guarantee / Bank Guarantee Bond

In consideration of the Director of All India Institute of Medical Sciences Bhubaneswar (hereinafter called "AIIMS Bhubaneswar") having offered to accept the terms and conditions of the proposed agreement between AIIMS Bhubaneswar and (hereinafter called "the said Vendor(s)") for the supply, installation & commissioning of (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees only) as a bid security/performance guarantee from the vendor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement with reference to tender No.....

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the AIIMS Bhubaneswar an amount not exceeding Rs. (Rupees..... Only) on demand by the AIIMS Bhubaneswar.
2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the AIIMS Bhubaneswar stating that the amount claimed as required to meet the recoveries due or likely to be due from the said vendor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupeesonly)
3. We, the said bank further undertake to pay the AIIMS Bhubaneswar any money so demanded notwithstanding any dispute or disputes raised by the vendor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the vendor(s) shall have no claim against us for making such payment.
4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the AIIMS Bhubaneswar under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Director AIIMS Bhubaneswar on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Vendor(s) and accordingly discharges this guarantee.
5. We, (indicate the name of the Bank) further agree with the AIIMS Bhubaneswar that the Institute shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Vendor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said vendor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Vendor(s) or for any forbearance, act of omission on the part of the AIIMS Bhubaneswar or any indulgence by the AIIMS Bhubaneswar to the said Vendor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Vendor(s).
7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the AIIMS Bhubaneswar in writing.

8. This guarantee shall be valid up tounless extended on demand by the AIIMS Bhubaneswar. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor.....(indicate the name of the Bank)
(Name, designation and code No. of the Bank Officer(s) signing the guarantee)

(Address & other details of the Controlling Officer of the branch of the bank issuing the BG)

CHAPTER – III

Financial Bid (Applicable only if participating)

Name of the E-Tender: Supply, Installation & Commissioning of *Regional Simulation Lab* at AIIMS, Bhubaneswar.

S. No.		Qty	Unit	Rate per unit	GST%	GST Amount	Total Amount including GST (Rs)
A.	PATIENT CARE SKILLS						
1	Seamless limbs Patient Care Simulator	1	Nos				
2	NG, OG & PEG Tube Feeding Simulator	1	Nos				
3	Airway Suction Training simulator	2	Nos				
4	Advanced Oral care Simulator	3	Nos				
5	Medical Foot Care Simulator	1	Nos				
6	Decubitus Treatment Model	1	Nos				
7	Male Catheterization & Enema Simulator	1	Nos				
8	Female Catheterization Simulator	1	Nos				
9	Physical Assessment Trainer	1	Nos				
10	Pitting Edema Simulator	1	Nos				
B.	INJECTION SKILL MODELS						
1)	I.V. Arm with circulation pump	3	Nos				
2)	Intradermal injection Training simulator	2	Nos				
3)	Arterial Puncture Training Simulator	1	Nos				
4)	Basic IV Arm:	2	Nos				
5)	Intravenous Arm Simulator (Two arm and circulation pump set):	2	Nos				
6)	Peripheral Venous Catheter Placement Simulator	2	Nos				
7)	Lumbar Puncture Simulator	1	Nos				
8)	Gluteal Intramuscular Injection simulator II	2	Nos				
9)	Gluteal Intramuscular Injection Model II	2	Nos				
10)	Pediatric IV hand simulator	1	Nos				
11)	Multipurpose Injection Model	2	Nos				
C.	OBSTETRIC AND GYNAE SKILLS						
1)	Vaginal Examination Model (Vulva)	1	Nos				
2)	Full- Body Pregnancy simulator	1	Nos				
3)	Maternity Model	3	Nos				
4)	Midwifery Practice Model	2	Nos				
5)	Fetal Head Extractor for Obstetric Model	3	Nos				
6)	Female Organ Model	3	Nos				
7)	Breast Cancer inspection and Palpation simulator	3	Nos				
D.	PEDIATRIC CARE SKILLS						

1)	Hi-Fidelity Baby/Neonate Basic Life Support (BLS) Simulator with Full CPR Parameter Reporting and Analysis	2	Nos				
2)	Neonatal Resuscitation Simulator	3	Nos				
3)	Infant Girl Model for nursing Practices	4	Nos				
4)	Neonatal Vital Signs Simulator	1	Nos				
5)	Infant Nursing Practice Model	3	Nos				
6)	Paediatric Patient Care Simulator	1	Nos				
7)	Paediatric Lumbar Puncture Simulator	1	Nos				
E.	AUDIO VISUAL SYSTEM (As per specifications at E AV System)		Nos				
	SITC of 75 inch LED Professional Display	1	Nos				
	SITC of Video Conferencing Camera	1	Nos				
	SITC of Speakerphone for Video Conferencing	1	Nos				
	SITC of e-Podium	1	Nos				
	SITC of Wall Mount Speakers	2	Nos				
	SITC of Portable Document Camera/ Visualizer	1	Nos				
	Necessary Cables and Connectors	1	Nos				
	IP IR Dome Camera	7	Nos				
	Network Video Recorder	1	Nos				
	16 Port Poe Switch	1	Nos				
	8Port switch	1	Nos				
	Cat 6 Cable (305 Mtr Roll)	2	Box				
	Computer Table	1	Nos				
	Computer	1	Nos				
	4U Rack	1	Nos				
	RJ 45 Connector	50	Nos				
	PVC conduit	250	Mtr				
	TOTAL AMOUNT INCL. GST :						
2	CMC CHARGES						
	CMC (6 th year)						
	CMC (7 th year)						
	CMC TOTAL :						
	GRAND TOTAL INCLUDING CMC:						

(Note : All items to be quoted separately)

(Rupees _____ only)

1. I/We have gone through the Terms & Conditions as stipulated in the Bid document, Scope of work & detailed specifications as mentioned in the document and confirm to accept and abide by the same.
2. That I/We shall complete the work in all respects within the stipulated period.
3. Warranty Period : Five years from the date of installation
4. CMC : Two years after warranty period
5. Technical Support for upkeep and maintenance of the Lab : Uninterrupted one year.
6. That I/We undertake that the information given in this bid document are true and correct in all respects.
7. L1 will be decided on the basis of Grand Total quoted by the bidders including CMC charges. The complete project will be awarded to the L1 Bidder.

Name(s) & Signature of the Bidder with rubber seal(s)

Name of the Firm

Date.....Place.....

E-TENDERING INSTRUCTIONS TO BIDDERS

General:

The Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as given in this Tender Document. Submission of Online Bids is mandatory for this Tender. E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Suppliers / Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, AIIMS BHUBANESWAR has decided to use the portal www.tenderwizard.com/AIIMSBBBSR, <https://eprocure.gov.in> or www.aiimsbhubaneswar.edu.in

Instructions:

1. Tender Bidding Methodology:

Two Stage Online Bidding

2. Broad outline of activities from prospective Bidders:

1. Procure a Class III Digital Signature Certificate (DSC)
2. Register on the e-Procurement portal www.tenderwizard.com/AIIMSBBBSR
3. Create Users on the above portal
4. View Notice Inviting Tender (NIT) on the above portal
5. Download Official Copy of Tender Documents from the above portal
6. Seek Clarification to Tender Documents on the above portal. View response to queries of bidders, posted as addendum, by AIIMS,BBSR
7. Bid-Submission on the above portal.
8. Attend Public Online Tender Opening Event (TOE) on the above portal - Opening of Technical Part
9. Post-TOE Clarification on the above portal (Optional) – Respond to AIIMSBBBSR's Post-TOE queries.
10. Attend Public Online Tender Opening Event (TOE) on the above portal - Opening of Financial Part (Only for Technical Responsive Bidders)

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the above portal.

3. Digital Certificates:

For integrity of data and authenticity / non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class III, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

4. Registration :

To use the Electronic Tender portal www.tenderwizard.com/AIIMSBBBSR, vendors need to register on the portal. Registration of each organization is to be done by one of its senior persons vis-à-vis Authorised Signatory who will be the main person coordinating for the e-tendering activities. In the above portal terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal, and follow further instructions as given on the site. Pay Annual Registration Fee as applicable.

Note: After successful submission of Registration details and Annual Registration Fee, please contact to the Helpdesk of the portal to get your registration accepted/activated.

1. The Bidder must ensure that after following above, the status of bid submission must become – “Submitted”.
2. Please take due care while scanning the documents so that the size of documents to be uploaded remains minimum. If required, documents may be scanned at lower resolutions say at 150 dpi. However it shall be sole responsibility of bidder that the uploaded documents remain legible.
3. It is advised that all the documents to be submitted are kept scanned or converted to PDF format in a separate folder on your computer before starting online submission.
4. The Financial part may be downloaded and rates may be filled appropriately. This file may also be saved in a folder on your computer. Please don't change the file names & total size of documents (Preferably below 5 MB per document) may be checked.

Bid submission

The entire bid-submission would be online on the Tenderwizard portal i.e. <https://www.tenderwizard.com/AIIMSBBBSR>

Broad outline of submissions are as follows:

- (i) Submission of Bid Parts (Technical & Financial)
- (ii) Submission of information pertaining to Bid Security/ EMD.
- (iii) Submission of signed copy of Tender Documents/Addendums.

The TECHNICAL PART shall consist of Electronic Form of Technical Main Bid and Bid Annexure. Scanned/Electronic copies of the various documents to be submitted under the Eligibility Conditions, offline submissions, instructions to bidders and documents required to establish compliance to Technical Specifications and Other Terms & Conditions of the tender are to be uploaded.

The FINANCIAL PART shall consist of Electronic Form of Financial Main Bid and Financial Bid Annexure, if any. Scanned copy of duly filled price schedule as **Annexure** are to be uploaded.

Offline Submissions:

The bidder is requested to submit the following documents offline to **The Sr. Procurement-cum Store Officer, AIIMS, Sijua, Bhubaneswar (Odisha) – 751019** on or before the date & time of submission of bids specified in covering letter of this tender document, in a Sealed Envelope. The envelope shall bear (name of the tender), the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).

1. EMD-Bid Security in Original, in shape of FDR/BG only pledged in favour of AIIMS, Bhubaneswar, valid for a period 180 days
2. Documents as Per NIET

Public Online Tender Opening Event (TOE)

The e-Procurement portal offers a unique facility for 'Public Online Tender Opening Event (TOE). Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices.

For this purpose, representatives of bidders (i.e. Supplier organization) duly authorized. Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)' has been implemented on the portal. As soon as a Bid is decrypted, the salient points of the Bids are simultaneously made available for downloading by all participating bidders. The medium of taking notes during a manual 'Tender Opening Event' is therefore replaced with this superior and convenient form of 'Public Online Tender Opening Event (TOE)'. The portal provides a unique facility of 'Online Comparison Statement' which is dynamically updated as each online bid is opened. The format of the Statement is based on inputs provided by the Buyer for each Tender. The information in the Comparison Statement is based on the data submitted by the Bidders. A detailed Technical and / or Financial Comparison Statement enhance Transparency. Detailed instructions are given on relevant screens. The portal has a unique facility of a detailed report titled 'Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/Downloading'. There are many more facilities and features on the portal. For a particular tender, the screens viewed by a Supplier will depend upon the options selected by the concerned Buyer.

Important Note: In case of internet related problem at a bidder's end, especially during 'critical events' such as – a short period before bid-submission deadline, during online public tender opening event it is the bidder's responsibility to have backup internet connections. In case there is a problem at the e-procurement / e-auction service-provider's end (in the server, leased line, etc) due to which all the bidders face a problem during critical events, and this is brought to the notice of AIIMSBBBSR by the bidders in time, then AIIMSBBBSR will promptly reschedule the affected event(s).

Other Instructions

For further instructions, the vendor should visit the home-page of the portal. The complete help manual is available in the portal for Users intending to Register / First-Time Users, Logged-in users of Supplier organizations. Various links are also provided in the home page.

Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups and minimize teething problems during the use of the said portal.

The following 'FOUR KEY INSTRUCTIONS for BIDDERS' must be assiduously adhered to:

1. Obtain individual Digital Signature Certificate (DSC) well in advance of your first tender submission deadline on the portal.
2. Register your organization on the portal well in advance of your first tender submission deadline on the portal
3. Get your organization's concerned executives trained on the portal well in advance of your first tender submission deadline on the portal
4. Submit your bids well in advance of tender submission deadline on the portal (There could be last minute problems due to internet timeout, breakdown etc)

While the first three instructions mentioned above are especially relevant to first-time users on the portal, the fourth instruction is relevant at all times. Minimum Requirements at Bidders end Computer System with good configuration (Min P IV, 1 GB RAM, Windows XP) Broadband connectivity. Microsoft Internet Explorer 8.0 or above. Digital Certificate(s) Vendors Training Program Necessary training to each and every registered bidder under this portal shall be imparted by the ASP, M/s. ITI, Bhubaneswar, if required, before participation in the online tendering.

For any further assistance, please contact Mr Sanjeeb Kumar Mahapatra (07377708585), Helpdesk-011-49424365, ITI email ID for mailing communication:- twhelpdesk404@gmail.com / twhelpdesk680@gmail.com / twhelpdesk614@gmail.com