Notice Inviting e-Tender

West Bengal Medical Services Corporation Limited
Swasthya Sathi
GN-29, Salt Lake, Sector-V
Kolkata-700091

Phone No (033) 40340308/319
E mail: procurement@wbmsc.gov.in

PROCUREMENT OF DIFFERENT EQUIPMENTS FOR ESTABLISHMENT OF PHYSICAL MEDICINE & REHABILITATION CENTRE (PMRC) UNDER THE PROJECT IMPLIMENTATION OF HEALTH & FAMILY WELFARE DEPARTMENT.

(Submission of Bid through *online*)

Bid Reference No.: WBMSCL /NIT-228/2018	Dated –19.11.2018

The following amendments have been made in the tender document. The changes are highlighted in yellow in the document below,

Amendment – I (Revised Technical specifications)

Schedule-I

Traction lumber and cervical both (continuous, intermittent and harmonic intermittent with treatment couch)

1. Microprocessor controlled traction system.
2. Different traction Modes and operation through a colour LCD display
3. Attach traction table which is electrically operated with or without remote.
4. Traction force 1 Kg to 90 Kg or more
5. Treatment time 1min to 60 min or more
6. Hold - Rest time 1sec to 60 sec or more
7. Traction memory: 10 treatment pattern or more
8. Traction safety: A self-Diagnosis function & remote control for patient.
9. Automatic tension release when emergencies occur
10. Pre- set protocols
11. Free memories for customized protocol
12. Standard and Safety: US FDA or European CE or BIS approved product.

Note: - Documentation

a. User / Technical / Maintenance manuals to be supplied in English.
b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer. Documentation in service / Technical manual.
c. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-II

High Frequency Mobile C-ARM IITV System

The system should have the below mentioned specifications:

1. I.I.T.V. SYSTEM:
    a) The image intensifier should be of latest series
    b) It should be of 9 inches triple field i.e. 9 inches / 6 inches / 4.5 inches
    c) The center resolution should be minimum 48 lp/cm.
    d) The circular grid should be fixed on the Image Intensifier (I.I.) to improve image quality.
2. C-ARM STAND:
    a) It should be ruggedly built and should be of good design
    b) It should have 2 separate steering for controlling back and front wheel movements
    c) It should also have the below mentioned movements.
        - Horizontal travel should be minimum 200 mm
        - Orbital movement should be 115°
        - Panning movement should be ±12.5°
        - Vertical movement should motorized of 400 mm
        - Focus to I.I distance should be 900 mm
        - C-Arm rotation should be ±180° (Preferably ±360°)
3. CCD CAMERA:
    a) The CCD camera should be ½ inch and of 0.3 lux; should be of internationally reputed make
        - It should have resolution of 1k x 1k minimum
4. MONITORS:
    a) Medical grade monitor minimum 19 inches more on trolley – 2 Nos.
    b) The monitor trolley should be provided for mounting 2 monitors and should have 2 shelf for keeping memory and stabilizer.
5. GENERATOR:
    a) It should be microprocessor controlled digital system with display.
    b) It should be of high frequency with output of minimum 3.5 KW and frequency of 40 KHz. (Preferably 100 KHz)
    c) The KV should be from 40 to 110 KV.

d) The fluoroscopic mA should be from 0.3 to 3.0 mA or wider.
e) The system should have fluoroscopy mode like
   - Manual Flouro mode and Continous Flouro mode.
   - Pulsed fluoro mode with facility to select time interval between the pulses from 1 sec to 10 secs
   - Auto Dose Rate Control in fluoroscopy mode by which mA & KV should be set automatically as per the thickness of the organ.
   - Manual KV selection during fluoroscopy also should be available.
   - Boost fluoroscopy mode (optional) / High Definition Fluoroscopy
f) The digital fluoroscopic timer should be incorporated with arrangement of auto cut off of exposure after 300 secs.
g) The radiographic mAs range should be from 20 to 100 mAs or more
h) The X-ray tube should be dual focus stationary anode. The focal spot of the tube should be
   1) Small: 0.6mm x 0.6mm
   2) Large: 1.5mm x 1.5 mm.

It should have mono block / tube housing heat storage capacity of 200 KHU or more. It should also have inherent filtration of 0.7mm or more Al eq.

i) The system should have backlit LCD display of flouro mA, KV, timer & radiography mAs should be provided.
j) The reversal, image rotation, functions should be operatable either from control panel or with a remote control.
k) Memory functions like store recall/image transfer should be operatable from control panel as well as from memory unit.
l) There should be independent selection of mA and KV & mAs.
m) The control should have indicator for power, Overload, X-Ray & Tube heating
n) The system should be upgradable to latest functions

6. IMAGE MEMORY:
   a) Digital Image Processing & Memory system with PC or a USB Drive.
   b) The System should have DVD recording facility as externally or internally.
   c) It should have 100 images
   d) It should have at least 100 permanent images storage capacity
   e) It should have image integration function to reduce the image noise
   f) Should be capable of copying images to Pen Drive.

ESSENTIAL ACCESSORIES:

a) Lead aprons, Thyroid Shield, Lead Goggles (12 nos each)
b) Lead apron stand – 12 Nos. & Hanger (6)
c) Servo stabilizer -1

7. Should be AERB approved

8. The system should be DICOM compatible.

   The product should have US FDA or European CE or BIS approved.

Schedule-III

MUSCULOSKELETAL USG

1. Frequency processing facility for THR transducer should be 7.5-12 mhz or better. This must be offered with independently selectable gain control in lateral position
2. Triplex imaging should be standarer on the system.
3. System must be offered with acquisition fram rate of at least 1000 frames/sec.
4. System must be offered with cine loop review facilicty. Should be able to acquire and display upto 1000 frame 2d and color image for restropective review and image selection.
5. Storage- should have direct connectivity to inject printer for printing image and reports.
6. Archive- should have facility transferred to integrated cd writer.
7. Full function measurement facility and calculation should be possible.
8. System must be offered with user friendly high resolution user interface touch panel or intuitive keyboard.
   System must be offered with tissue harmonic imaging system.
9. Transducers (a)-2-5 MHz broadband curved array transducer Imaging; (b) 4-12 MHz linear array transducer for vascular, Small parts imaging.(e) all probes should have tissue harmonic imaging
10. Should have European CE / US FDA certificate

Schedule-IV

EMG / NCV / VEP / BERA Machine WITH PRINTER

Specifications:

1. Common mode input impedance > 200 Mohms.
2. Sampling Rate – 40 KHz
3. A/D convertor – 16 bits
4. High pass Filter from 0.02 Hz to 3 KHz
5. Low pass Filter from 10 Hz – 10 KHz
6. CMRR > 100 dB
7. Noise Level (RMS) < 0.8 μV

8. Notch filter ; 50 Hz, 60 Hz on or off
9. Electric stimulus duration should be 0.05 to 5 mS, Electric stimulus amplitude should be 1 to 100 mA and Electric stimulus frequency : 0.1 to 100 Hz

EMG/NCV/EP Software:

1. Should have NET based software for comprehensive database search & storage.
2. Motor NCV with automatic marking.
3. Sensory NCV with automatic marking.
4. Motor and Sensory inching.
5. Tremor analysis.
6. F wave with split screen display with automatic marking of F responses showing the Max F, Min F and F block values.
7. H Reflex, Blink reflex, Sacral Reflex, Bulbocavernous Reflex, T Reflex, Galvanic Skin Responses / Sympathetic Skin response (SSR).
8. Repetitive Stimulation.
9. Insertional / Spontaneous EMG recording for unlimited duration on hard disk for unlimited times or unlimited buffer storage.
10. Quantitative EMG test features must be included.
11. EMG replay of stored EMG data from hard disk with audio.
12. Multiple motor unit Analysis.
13. Single Motor unit Analysis.
14. Jitter analysis for single fibre test
15. Incremental MUNE.
16. Mune (MUP Decomposition)
17. Macro EMG.
18. Short-, middle- and long-latency auditory EP.
19. Short- and long-latency somatosensory EP.
20. Auditory stimulation with clicks and tones.
21. Visual evoked potentials: Pattern reversal VEP, Flash VEP, Goggle VEP.
22. Cognitive EP-P300, CNV, MMN
23. Automatic rapid report generation with unlimited user templates.

24. Facility of comparing patient data with normative data & to flag abnormal values automatically.
25. Automatic sentence generator.
26. Report generation to be customizable and in MS word format & PDF format.
27. Must be operating on Windows 7 or latest version.
28. Facility of including the waveform & numerical data as per user requirement in patient report.
29. Provision for hard copy output of recordings on a laser colour printer of 600 dpi resolution.
30. Dedicated control panel cum function via Bluetooth or USB interface.
31. Possibility to connect a Magnetic stimulator.

Set of EMG electrodes:

1. Surface electrode – 1 pair
2. Stimulating bar electrode – 1 no.
3. Ring electrode – 1 pair
4. Ground electrode with cable (paediatric) – 01 no.
5. Ground electrode with cable (adult) – 01 no.
6. Disposable concentric needle electrode – 25 pcs
7. Holder for needle electrode connection – 1 no.
8. Disposable surface electrode (set of 100 pcs.)
9. Adapter for disposable electrodes connection with Alligator clip – 2 pcs.
10. Gold plated cup electrode (EP Study) – 10 pcs
11. Pup-jack linker (Jumper Electrodes) – 5 pcs.

Set of stimulators:

1. Electrical Handheld stimulator.
2. 15″ TFT Monitor for pattern stimulator.
3. Visual Stimulator (LED goggles)
4. Adaptor for Visual pattern-stimulator
5. Auditory stimulator (headphones)
6. Should have European CE / US FDA certificate

Schedule-V

Extracorporeal Shock Wave Therapy Unit

1. Atleast 2 hand pieces and 2 output channels.
2. Vibrator head for muscle treatment.
3. Focus head for tendinopathy.
4. Should have free memory
5. Should have more than 7" LCD touch screen
6. Frequency 50/60 Hz.
7. Should have possibility to add extra indications and software
8. Should have therapy selection option: via indication list or via body part
9. Pressure 0 to 5 bar.
10. Different Frequency (atleast 3, 5 and 10Hz)
11. Standard and Safety: US FDA or European CE or BIS approved product.
12. Note :- Documentation

    a. User / Technical I Maintenance manuals to be supplied in English.

    b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer.

    c. Documentation in service I Technical manual.

    List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-VI

Cryotherapy unit

1. Flexible hose with various different attachable nozzles more than 1 mm length with a head that can be rotated through 360 degree
2. Should have simple control panel with large LCD screen with backlight
3. Should have min air flow temperature -30°C or less.
4. 3 nozzles of different sizes.
5. Should have guide therapy System.

6. Should have measure the temperature of the treated area and adjust its cryoflow automatically to control the temperature and keep it constant.

7. Should have effective thermal shock.

8. Standard and Safety: US FDA or European CE or BIS approved product.

Note :- Documentation

a. User / Technical I Maintenance manuals to be supplied in English.

b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer documentation in technical service manual.

c. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-VII

Balance System

1. Dimensions:

   Base: 30″ w X 44″ depth X 8″ h (76 X 112 X 20 cm)

   Platform: 21.5″ dia (55 cm)

   Display Height: Adjustable from 53″ to 68″ h above platform (135 X 173 cm);

   76″ h (193 cm) maximum from floor.

2. Support Rails: Adjustable from 25″ to 36.5″ above platform (64 to 93 cm)

   Rails can swing away from platform when not in use.

3. Platform Tilt: 20 degrees from horizontal in all directions.
4. Stability Levels: Twelve levels, plus locked for static measurements
5. Game Port: Simulates joystick output suitable for PC compatible game port.
6. Colour Touch-Screen Display:

   Viewing Area: 6.6″ w X 5″ h (168 X 127 mm)

   Resolution: 800 pixels X 600 pixels

   Accuracy: +/- 1 degree of tilt

   Angle: Adjustable from vertical back to approximately 45 degree

7. Printer: HP DeskJet
8. Printer Stand: 24″ X 24″ (61 X 61 cm)
9. Patient Capacity: Up to 400 lb (136 kg)
10. Weight: 196 lb (89 kg)

11. Power: 115 VAC, 50/60 Hz, 15 amp line or 230 VAC, 50/60 Hz, 15 amp line

12. Power Rating: 350 watt

13. Certification: ETL listed to UL 2601-1 and cETL listed to CAN/CSA C22.2 No. 601-1-M90, IEC 60601-1

Schedule-VIII

EMG Biofeedback in Rehabilitation

1. Integrated vacuum unit for combination & electrotherapy plus cavity electrode
2. Adjustable audio signal
3. Stimulation and relaxation mode
4. Cavity electrode for incontinence
5. One channel pressure feedback in mmHg
6. 2 independent electrotherapy channels for rehabilitation, muscle strengthening, pain management.
7. Should be supplied with complete range of probes for EMG feedback and electro stimulation and pressure feedback (Anal or Vaginal) probes; surface electrodes for EMG feedback, rubber or adhesive electrodes for electric stimulation
8. Should have facility for treatment by setting objectives (viz. Sequential and conventional programs)
9. Should have free memory.
10. Standard and Safety: US FDA or European CE or BIS approved product.

Note :- Documentation

a. User / Technical / Maintenance manuals to be supplied in English.
b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer. Documentation in service / Technical manual.
c. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-IX

Ultra Sound Therapy (Calibrated)

1. Multi-frequence treatment head for 1 & 3 MHZ
2. Multi frequency transducer head for 4 cm square & 1 cm square
3. Peak intensity of 0 to 2W/CM square cycle 100% and 0 to 3W/CM square <100%
4. Continuous and pulse mode present
5. Digital programme memory settings & programme phonophoresis

6. Guided therapy system
7. Therapy selection option via indication list via body part and via objectives
8. Display of more than 10″ colour TFT touch screen
9. Operating voltage of 100-240 VAC/45-65Hz
10. Ergonomic head for massage and under water application.
11. Preset programme and free memories.
12. Standard and Safety: US FDA or European CE or BIS approved product.

Note: - Documentation

a. User / Technical / Maintenance manuals to be supplied in English.

b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer.

Documentation in service / Technical manual.

c. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-X

LASER (low level laser therapy)

1. Independent setting for scanning and LASER probe section
2. 1-10000HZ (adjustable) frequencies
3. Continuous and pulse therapy option
4. Safety eye wear for therapist and patient.
5. Automatic calculation of application time and energy density
6. Remote control
7. Safety device for stopping the emission.
8. Coloured touch screen.
9. Preset protocol.
10. Standard and Safety: US FDA or European CE or BIS approved product

Note :- Documentation

a. User / Technical / Maintenance manuals to be supplied in English.
b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer.
Documentation in service / Technical manual.
c. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-XI

C-Arm Compatible OT Table

1. The table should be Electro mechanical remote controlled operated system with auxiliary control on table column.
2. The Table should have four sections and table top should be radio lucent to permit X-RAY penetration and fluoroscopy.
3. The table should have translucent top
4. Table should have all surgical position like raising, lowering, trendelenburg, reverse trendelenburg, lateral tilt, flex, re- flex & chair position.
5. Table should have zero leveling facility.
6. Elevation range at least 72 cm to 100 cm.
7. Table can be rotated to 360 degree on its axis without shifting the base.
8. Measurements (all dimensions are approximated to +/- 10% variations)

Top dimension	L 1900 X W 550 mm
Trendelenburg / Reverse	20^0 / 20^0
Back Rest(up / down)	70^0 / 20^0
Leg Rest(up / down)	15^0 / 90^0
Head Rest(up / down)	20^0 /60^0

9. System Configuration Accessories, Spares and Consumables.
   a. SS bowl with clamps.
   b. Infusion rod with clamps.
10. Standard, Safety and Training
   a. US FDA or European CE or BIS approved product.
   b. Manufacturer should be ISO certified for quality standards.
   c. Should have local service facility. The service provider should have the necessary equipment.
11. Should be able to carry patient weight at least 150 kg.
12. Documentation
   a. User / Technical / Maintenance manuals to be supplied in English.
   b. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist.

Schedule-XII

Micro Wave Diathermy With Traction Table

1. Number Of Microwave Output 10
2. Intensity Level Available
3. Wave Guide With 3 Sides
4. Operating Frequency 245 MHz
5. Maximum Output 250 Watt
6. Peak Power In Pulsed Effusion 1500 Watt
7. Microprocessor Control Traction Unit
8. Can Perform Different Forces
9. Lumber And Cervical Traction
10. Safety Switch
11. Cervical 12 Kg, Lumber 60 Kg
12. Belt ,Strap ,Flexi Strap, Etc. Accessories
13. Couch

Schedule-XIII

Combination (Electrotherapy, LASER, Ultrasound) therapy unit

1. Should have guided therapy system.
2. It has more than 30 current forms - Direct current, Micro current, NMES, TENS, IFT, HVPC (high voltage pulsed current) etc.
3. It has programs for Iontophoresis & Phonophoresis
4. It has Diagnostic programs - S-D curve, Rheobase and Chronaxie.
5. It has two independent output channel
6. It has therapy selection option via indication list and via body part
7. It has TFT touch screen more than 10" full colour
8. It has Electrode placement using 3D picture guidance
9. It has multi frequency treatment head for 1 & 3Mhz and 1cm sq and 4 cm sq

10. It has safety class 3b LASER product

11. It has wavelength of LASER 904 nm and operating voltage of 100-240 V AC/45-65 Hz.

12. Standard and Safety: US FDA or European CE or BIS approved product.

Note: - Documentation

a. User / Technical / Maintenance manuals to be supplied in English.

b. Certificate of calibration and inspection. List of equipment available for providing calibration and routine Preventive Maintenance support as per manufacturer Documentation in service / Technical, manual.

c. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance Checklist.

Schedule-XIV

Gait Trainer (Treadmill With Instrumented Deck) With Platform To Reduce Body Weight (Unweighing Systems)

1. Spatial-Temporal parameter analysis
2. Pelvic Kinematic Analysis
3. Comparison With Normative Data: Spatial –Temporal Gait Parameters
4. Audiovisual Biofeedback of step length and step speed, step symmetry
5. Dynamic Suspension System
6. 5 cm Vertical Movement to Permit Normal Gait
7. Supports At Least 35% of Patients Body Weight

Amendment – II

Clause (4) Annual Turnover requirements: (E) under Instructions to Tenderers in page no. 4.

SCHEDULE	ITEM	Annual Turnover in Crore Rs.
Schedule-IV	EMG / NCV / VEP / BERA Machine with printer	1.0