

Government of West Bengal  
Office of the Principal, Burdwan Medical College, Burdwan  
Telephone: 0342-2658646 Fax: 2658636 E-mail:burdwanmedicalcollege76@gmail.com.

Memo.no.BMC/PC/ 2443

Dated Burdwan the 10.11.2020

**(TENDER NOTICE)**

Sealed Tender for supply of Equipment( TMT Machine) for the year 2020-2021 is invited by the Principal, Burdwan Medical College, Burdwan, from the manufacturers, reputed firms, dealers, stockiest and resourceful against. The last date of receipt / submission of said tenders is ~~10.12.2020~~ up to 1 P.M. and will be opened on the same date at 2 P.M. in presence of intending tenders.

Sl.No.

Earnest money to be deposited

**1. TMT MACHINE**

Rs. 50000/- (Fifty Thousand only)

Principal  
Burdwan Medical College,  
Burdwan

*[Handwritten Signature]*  
10/11/2020

Government of West Bengal  
Office of the Principal, Burdwan Medical College, Burdwan

Memo.no.BMC/PC/2443

Dated Burdwan the 10/11/2020.

List of the Equipment for the year- 2020 - 21.

Sl.No.	Name of Items Instrument	Make/Brand	Unit	Rate	Total Amount (Inclusive all charges)
1	TMT Mchine		One	A. Basic rate including 1 year warranty. B. 3 years CAMC charges(Yearwise).	

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**TERMS AND CONDITIONS RELATING TO TENDER FOR SUPPLY OF TMT MACHINE FOR DEPARTMENT OF CARDIOLOGY ( ANAMOY SSW),BMC&H,BURDWAN FOR THE YEAR 2020-21.**

**Period of contract:-**

The contract shall remain valid on and from Nov 2020 and shall continue up to 31<sup>st</sup> March 2021 or for such period as the Principal may direct.

**Place of Delivery:**

At different sections of stores Godown or anywhere within the college and Hospital premises as the case may be without any extra cost.

**SUBMISSION OF THE TENDERS:-**

The tender is to be submitted in a Two Bid System :

**"BID-A"**

One folder for "Essential Requirements of the Tendering Firm for participation" shall contain all papers related to the essential requirements of the Tenderer for participation in the tender viz.

1	TECHNICAL SPECIFICATIONS OF INSTRUMENTS
2	Copy of Demand Draft of Rs 50.000/- (Rupees Fifty thousand) only for the item quoted in favour of 'Principal, Burdwan Medical College' payable at Burdwan.
3	Application to participate in the tender as provided in the tender documents as
4	Authorization letter of signatory from Company .
5	Copy of agreement between the manufacturer and the Distributor .
6	Bid Security (Bank Guarantee) .
7	Credential.

**"BID-B": FINANCIAL BID:-**

**Financial Bid** shall contain the financial bids with the base rate per accounting inclusive of transportation, installation charges, freight charges and exclusive of GST & Others(whenever applicable) to be quoted. Rates should be quoted with warranty period & CMC rates separately per year .

During the tender evaluation process, the "Bid A" will be opened first. Those Tenderer who have qualified the essential requirements will be identified and only their "Bid B" will be opened. The "Bid B" of those Tenderer failing to meet the essential requirements of participating in the tender will not be opened and be rejected.

**Tenders:-**

The Tender must be sealed and completed all respects with copies of Income Tax PAN, Professional Tax Registration/ any Challan deposited in last six months from scheduled date of tender opening, GST Registration along with copy of last return filed, Certificate of country of origin, Updated Trade Licence, Manufacturing License, Import License with validity (for importers), Manufacturer's guarantee. ISI Certificate Earnest Money Deposit Rs. 50,000/- should be deposited through demand draft in favour of Principal, Burdwan Medical College, Burdwan. In absence of such documents, the tenders will be treated as cancelled.EMD may be exempted; who will produce the exemption certificate in favour of Company/Society.

  
Principal  
Burdwan Medical College  
Purba Bardhaman  
10/11/20

**Forfeiture of Earnest Money:-**

Earnest money Deposit will be forfeited to the Govt. in case of (i) if the lowest or selected Tenderer withdraw Tenders after opening or acceptance or any other forgery.

**RATES:**

Rates approved or accepted by the Principal in favour of respective Firms shall remain valid and operative throughout the period of contract and no place for the price variation will be entertained. Rates must be quoted both in figures and in words with make & specification inclusive of all charges. Acceptance of lowest rate is not obligatory. The undersigned reserves the right to reject any or to accept any tender without assigning any reason thereof. No erasure, overwriting, mutilation will be entertained .If so; the rates will be treated as cancel.

**Cancellation of Contract :** The Principal ( Contracting Officer ) shall be at liberty to terminate the contract after 15 (Fifteen ) days notice in case of the contract be found guilty of misconduct found or reported unsatisfactorily execution and the contractor shall not be entitle to claim any damage what so ever due to such termination.

**Risk Purchase & Penalty:-**

In the event of failure to supply the articles indented for within the stipulated time it shall be deemed that the contractors are unable to supply the requisitioned articles.

1. The articles obtained from other sources will not at the contractor's risk and the cost so incurred over and above the contract rates shall be paid by the contractors without further reference to them. Such excess expenditure shall be recovered from any money due to the contractors or in any other legal manner.
2. Tenders must be sealed cover super scribed with "TENDER FOR EQUIPMENTS "for the year 2020- 21 in Capital Letters and the name of tenderer on the left hand side of the sealed cover.
3. **Warranty:** -The Supplier will provide 1 (Owo) year Warranty + 3 yrs CAMC comprehensive Annual Maintenance Contrac including all spare parts and repairs.(As per table).
4. The Manufacturer should be able to provide service of Equipments across India within 24 Hrs. after receipt of break down report for the metro location and within 3 days for the non-metro located Instruments.
5. Purchase reserves the right to subject the equipments for Independent evaluation of performance.
6. The company will provided installation qualification, operational qualification and performance qualification will log book for maintenance of the equipments at no extra cost.
7. Company will be responsible for Training of Technician on operation of equipments.
8. Manuals: Operation, maintenance and part list with detailed specifications must be provided in original.
9. No extra charges will be allowed for transportation and no damarage will be given from this end during transportation.
10. Successful bidders will be liable/bound to supply any particular items within stipulated time (ie. within 4 weeks from the issue of order) otherwise authority may cancel the contact of Tender without any further notification.

  
Principal,  
Burdwan Medical College, Burdwan

10/11/2020

# SPECIFICATION OF TREAD MILL TEST MACHINE

## TECHNICAL SPECIFICATIONS

### 1.Environmental

Operating temperature:  $-5^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$

Operating and storage :0 -95% non condensing humidity

### 2.Power supply

Input :230 V AC +/- 10% @ 50Hz; Power consumption <10 Watt

### 3.Performance

Display: 1024x768 pixels

Display area:320 mm x240 mm

Language :English

Alarm: Audio alarms for HR and ST level at pre configured values

QRS beep : on each QRS

### 4.Acquisition

Frequency response:0.05 Hz to 150 Hz with notch at 50 Hz

Filter :DSP

Input impedance :10 Ma

Time constant>3.2 sec

A/D conversion:12 bit

Noise:<20 DVp-p

Leakage current:<10  $\mu\text{A}$

Patient isolation: Optical isolation

Gain:5,10 and 20 mm/mV selectable

CMRR>120 dB



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Sweep speed : 25.0 mm/sec .

Accuracy of HR : +/- 2 BPM

Sampling frequency: 250 samples per second simultaneous

Models with blue tooth facility

Storage : 12 lead unaveraged ECG,10 second rhythm strips of 12 leads, medians after every 8 seconds along with HR,BP ,full disclosure of entire test

Leads off detection: Yes

Protocols:Pre- programmed protocol including BRUCE,Modified BRUCE, NAUGHTON,Modified BLAKE and user editable protocols.

Printouts :Automatic and manual online printing with grid on/off facility.Print color reports.

### Treadmill

Power :230 V,50 Hz,15 A

Power consumption:1.5 KVA

Incline range:0-22%

Dimension: LXW-2055 x 750 mm

Walking area :1440 x 500 mm

Weight : 100 kg

Patient weight : upto 250 kg

Belt speed :smooth.0-15 kmph

In house manufacturing :Yes

### 6.Minimum requirement of PC

1.Motherboard :Recommended

Speed :FSB,800 MHz and onwards

2.CPU:Recommended

Make: dual core or above,speed 2.4 GHz and above

3.RAM:Recommended

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3

Size :2 GB or above

Speed:1266 MHz or above

4.Serial ports(RS-232)/USB port:Two working serial ports,one for mouse and other for TMT acquisition unit

5. VGA card:64 bit,2 MB memory PCIVGA card

6.Monitor :15 " color monitor

7.SMPS:Recommended. Capacity:300-450 Watt

8.Hard disc:Recommended. Size: 120 GB 7200 RPM or above

9. Display settings: Resolution-1024 x 768

10. Key board with 101 keys

11.Mouse

12. Operating system: Windows 7 and onwards

13. 1 KVA stabilizer

14. CD/DVD/ROM: Recommended. 15. Printer :Recommended.Type : Laser jet

16. Independent earthing connection

### Detailed features

### ACQUISITION

- Body level acquisition of 12 lead ECG
- Simultaneous acquisition of 12 leads of ECG@ 250 samples per second per channel with ADC resolution of 12 bit
- Frequency Response-DSP filter of 0.05 to 150 Hz with notch at 50 Hz
- Leads off detection
- Facility to store 12 lead un averaged ECG
- Facility to record rhythm (10 second rhythm strips of 12 leads)
- Beep on QRS
- Facility to rerun test

### Acquisition display modes

- 12 lead display

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Display 12 lead, 4 second ECG on first screen. Enlarged medians next to each lead are displayed. In exercise stage basal enlarged medians and current medians are superimposed. Facility to move superimposed medians

• **3 lead display**

- 8 seconds display of 2 leads of ECG+1 QRS detection lead
- Facility to configure 3 leads to any of the 12 ECG leads
- Display lead sets (I,II,III) or (aVR,aVL,aVF) or (V1,V2,V3) or (V4,V5,V6)
- An enlarged exercise median median of the minimum ST level lead with fiducial points marked is displayed (The enlarged median can be any of the 12 leads in manual mode. In automatic mode, the lead having maximum ST depression is displayed by the system)
- Along with enlarged median, basal median is displayed in exercise stage and peak exercise median is displayed in recovery for comparison.

**Online display of following parameter in all display modes**

- Sweep speed
- METS
- Heart rate is updated every 4 seconds with symbol and Target heart rate with percentage of completion target heart rate
- BP in mm of Hg
- ST measurement mode (Manual/Auto)
- Current ST level and ST slope of enlarged median
- ECG gain with standardization pulse
- Test and phase duration in hh:mm format
- Exercise protocol stage name


**Online printouts**


Facility to print selected online reports


- Linked median report (12 linked medians with ST levels of selected long lead)
- 12 lead raw ECG report
- Automatic reports

**Facility to print selected stage reports automatically**

- Linked median report (12 linked medians with ST levels of selected long lead)
- 12 lead unaveraged ECG report
- 12 lead raw ECG report
- Rhythm report- 12 leads of 5 seconds or 6 leads of 10 seconds
- Mixed median report with one Median complex+2.5 seconds ECG of each lead
- Extended mixed median report- one median complex+one basal median complex +2.5 seconds ECG of each lead

  
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- Selected median report

#### Stage reports configuration includes

- ✓ Reports at stage end
- ✓ At set interval in EXERCISE and RECOVERY stage
- ✓ Automatic PEAK EXERCISE linked median printout
- ✓ 6 leads of 10 seconds or 12 leads of 5 seconds selection for rhythm report
- ✓ Automatic PEAK EXERCISE linked median printout(10 seconds after exercise is stopped)Grid on/off

#### Acquisition settings

- Facility to enter BP 50 seconds before end of each exercise stage
- Relearn the median template
- Facility to enter a stage comment in each phase
- Gain: 0.5,1.0,2.0 mV/cm
- Change the QRS detection lead
- Automatic /Manual detection of fiducial points(E,J,Post J)
- Hold /Release treadmill stage
- QRS beep On/Off
- Filters On/Off

#### Review

- Review data of selected patient
- Grid/Graph/No grid option on all review screens
- Facility to edit HR and BP of any stage
- Facility to edit patient details

#### Review display modes

- 12 medians screen
- 12 medians are displayed with ST level
- Mixed median report with one median complex +2.5 seconds ECG of each lead
- Facility to zoom median of selected lead and edit fiducial points
- Trends
  - Trends of HR,BP,ST level,ST slope,J amplitude
  - 8,16,32,48,56 seconds resolution
- View and print rhythm strips marked during acquisition. Facility to select 12 leads of 5 seconds or 6 leads of 10 seconds for each printout

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6



- View unaveraged ECG
- Superimpose medians of any 2 stages in different colors
- Full wave disclosure of 1 minute of any lead
- Edit and print summary report using standard edit options

### Reports

- 12 lead linked median (single/all stages)
- Mixed median report
- 6 lead rhythm report of 10 seconds (single/all stages)
- 12 lead unaveraged ECG report
- Extra comments report
- Stage report
- Brief summary report
- Trends report (HR, BP, ST levels/ST slopes, J amplitude of 3 configured leads)
- Full wave disclosure of 1 minute of any lead
- Facility to print superimposed medians of any 2 stages in different colors
- Summary report (Hospital address and referring doctors designation to be printed in summary reports)
- ST levels and slope table
- Extended mixed median report
- Selected median report

### Settings

- ✓ Hospital details
- ✓ Referring doctor list
- ✓ Standard summary report option
- ✓ ST – Win system configuration
- ✓ Treadmill protocol

#### Available standard protocols

- BRUCE
  - MODIFIED BRUCE
  - NAUGHTON
  - MODIFIED BLAKE
- ✓ Printing details configuration
  - ✓ System configuration
    - ❖ Speed in km/hr or m/s

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7



- ❖ TM speed at exercise stop (slow -0 km/hr,fast- 1.2 km/hr)
- ❖ ST level lead in summary
- ❖ Long lead in reports
- ❖ Screen display leads(3)
- ❖ 3 leads in Trend report
- ❖ Stage report leads
- ❖ Treadmill support
- ❖ COM Port selection for amplifier
- ❖ Median update time is configurable to 1-8 sec

#### Utilities

- ❖ Test Treadmill
- ❖ Test acquisition unit
- ❖ Calibrate TM speed
- ❖ Calibrate TM grade
- ❖ Delete printout from printer queue

#### Display

- Resolution-1024x768
- 15" monitor

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