

Offline- Open Tender NATIONAL TENDER ENQUIRY DOCUMENT

FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF MEDICAL EQUIPMENTS

For & on behalf of **FOR**

KALPANA CHAWLA GOVT. MEDICAL COLLEGE, KARNAL

Tender Enquiry Document No.: HSCC/KCGMC/Medical Equipment/2016/off/H/01/A Dated 04.11.2016

BY



HSCC (INDIA) LTD

(A GOVERNMENT OF INDIA ENTERPRISE)

Plot No. 6-A, Block-E, Sector-1, NOIDA (U.P.) - 201 301

PHONE: 0120-2540153

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KALPANA CHAWLA GOVT. MEDICAL COLLEGE, KARNAL, HARYANA



GOVT OF HARYANA

Tender Enquiry No.: HSCC/KCGMC/Medical Equipment/2016/off/H/01/A Dated 04.11.2016

NOTICE INVITING TENDERS (NIT) - Offline

HSCC (India) Ltd. for and on behalf of Director General, Medical Education & Research, Panchkula, Govt. of Haryana invites **offline bids** from eligible bidders, in single stage two bid system for Supply, Installation, Testing, Commissioning & Handing-over of various **Medical Equipments for Kalpana Chawla Govt. Medical College, Karnal, Haryana**:

| Item no. | Name of Item | Qty. | Department | EMD Amount Rs. | |
|-------------|--|------|------------|-------------------|-----|
| | Microprocessor based spectrometer | 2 | Medicine | 20,000.00 | III |
| 2 | Contact microhystroscope | 1 | Obs & Gyno | 21,000.00 | IV |
| 3 | NST machine | 4 | Obs & Gyna | 30,000.00 | IV |
| | Cardiotocogram machine (CTG) - 05 Nos for Labour room , 02 nos for (xi) WARDS | 7 | Obs & Gyno | 50,000.00 | IV |

| S1. No. | Description | Schedule |
|------------|--|---|
| i. | On line sale of tender enquiry documents | 04.11.2016 to 25.11.2016 upto 12.30 hrs |
| ii. | Place of sale of Tender Enquiry Documents | HSCC (India) Ltd, Plot No. 6-A, Block-E, Sector-1, Noida (U.P)-201301 |
| iii. | Cost of the Tender Enquiry Document | INR 500/- |
| iv. | Pre Tender Meeting Date & Time | 09.11.2016 , 11:00 hrs. IST |
| v. | Pre Tender Meeting Venue | Same as (ii) above |
| vi. | Closing date & time for receipt of Tender | 25.11.2016. , 13.00 hrs IST |
| vii. | Time and date of opening of Techno – Commercial tenders | 25.11.2016 , 13:30 hrs IST |
| viii | Venue of Opening of Techno Commercial Tender | Same as sr no. (ii) above |

- 1. TE Document fee Rs. **500/- per** set in the form of account payee Demand Draft/Pay Order/Cashier's Cheque/Banker's Cheque drawn on a scheduled Bank in India/ cash in favour of **"HSCC (India) Ltd"** payable at New Delhi/ Noida.
- 2. Bidder shall download the TE documents from the web site http://eprocure.gov.in/cppp, www.hsccltd.com, and submit its tender by utilizing the downloaded document, along with the required non-refundable fee as mentioned in Para 1 above.
- 3. All prospective bidders may attend the Pre Tender meeting. The venue, date and time indicated in above.
- 4. Bidder shall ensure that their bid, complete in all respects, are dropped in the Tender Box located at **HSCC** (India) Ltd, Plot No. 6-A, Block-E, Sector-1, NOIDA (U.P.) 201 301 on or before the closing date and time, failing which the bid will be treated as late and rejected.
- 5. In the event of any of the above mentioned dates being declared as a holiday / closed day for the purchase organisation, the tenders will be sold/received/opened on the next working day at the appointed time.



- 6. The TE Document is not transferable.
- 7. **Bidder qualification Criteria:** Bidder should have turnover **Rs. 50 lakhs** per annum during last three financial years (i.e. 2013-14, 2014-15 & 2015-16)
- 7. Sealing of bid:
- Envelop I: a. Bid Security (EMD)/Registration certificate for the item quoted issued by NSIC/ DGS&D for exemption of EMD and bid document fee.
 - b. Tender Document fee @ Rs. 500/-
- Envelop II: a. Tender Form duly singed & filled
 - **b. Turnover certificate during last** three financial years (i.e. 2013-14,

2014-15 & 2015-16 certified by Chartered Accounted

c. Technical compliance sheet with technical leaflets

Envelop III: Price Bid /Financial Bid

These above envelopes I, II & III shall be further sealed in one outer envelope super scribing name of item, item no. and TE document No.

8. If Bidder submit bid security / performance security amount in the form of Demand Draft (i.e. DD)/ Bank Guarantee in favour of **HSCC (India) Ltd"**

9. Rejection of bid:

If EMD & tender document fee / Registration certificate for the item quoted issued by NSIC/ DGS&D for exemption of EMD and bid document fee, as mentioned in the tender document not found in envelop-I, their bid will be rejected and Envelop –II & III will not open by the committee

CHIEF GENERAL MANAGER HSCC (I) Ltd. For & on behalf of DGMER, Panchkula.

Terms & conditions:-

- 1. **Period of Validity:** A bid shall remain valid for **120 days** from the date of submission to HSCC.
- 2. **EMD:** Tenderer shall furnish along with its tender, earnest money for amount as shown in the NIT. The earnest money shall be furnished in one of the following forms:
 - i) Account Payee Demand Draft, (ii) Banker's cheque and (iii) Bank Guarantee as per format

The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the "HSCC (India) Ltd" payable at New Delhi/Noida. In case of bank guarantee, the same is to be provided from any commercial bank in India (as per the format in tender enquiry document). EMD to be valid for 165 days from the initial date of opening of the bid. The tenderer who are currently registered and, also, will continue to remain registered during the tender validity period with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. Vague stipulations in the Registration Certificate such as "to customers' specification" etc. will not be acceptable for exemption from furnishing of earnest money. In case the tenderer falls in these categories, it should furnish copy of its valid registration details in its bid (with DGS&D or NSIC, as the case may be)



- 3. **Rate:** a)The Prices should be quoted in Indian Rupees only. The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account. All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price. The rate quoted must be inclusive of Excise Duty, Packing & Forwarding charges, Sales Tax, entry tax, Freight charges and Insurance charges. The risk of damage or loss in transit if any will be rest on the suppliers only.
 - b) CMC price has to be quoted as per format given in the bid.
- 4. **Sales Tax/ Vat**: Should be mentioned on price format.
- 5. **Evaluation:** The tenderers will be evaluated and compared separately for each item. The tenderer has to quote for the complete requirement given under the item. Comparison of the responsive tenders shall be carried out on all inclusive quoted price at Consignee site basis, inclusive of applicable taxes, duties, incidental services. The rate quoted must be inclusive of Excise Duty, Packing & Forwarding charges, Sales Tax, Freight charges, entry tax and Insurance charges. The quoted CMC prices will also be added for comparison & ranking purpose for evaluation
- 6. The bid submitted by MSME bidders shall be dealt as per the prevailing laws

7. Name of Consignee: The Director

Kalpana Chawla Govt. Medical College,

KARNAL (Haryana)

Name of Purchaser: The Director, Kalpana Chawla Govt. Medical College, KARNAL

Name of consultant: HSCC (India) Limited, E 6(A), Sector -1, Noida

- 8. Delivery Period: 30 days from date of Notification of Award/Purchaser order to delivery at consignee site. The date of delivery will be the date of delivery at consignee site.
- 9. **Installation and commissioning:** Installation and commissioning shall be done **within 15 days** of receipt of the stores/ goods at site or within two weeks of handing over the site for installation, whichever is later.
- **10. Despatch Clearance:** No goods shall be despatched before issue of Despatch note issued by HSCC, failing which entire responsibility shall rest on the supplier.
- 11. **Warranty:** Warranty of equipments will be two years on site from date of commissioning & handing over to KCGMC/ Client.
- 12. **Performance Security:** Within fifteen (15) days from date of the issue of notification of award by the Purchaser/Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 24 months (as applicable warranty period of 2 years) from the date of Notification of Award.
- 13. This Notification of Award/Purchaser order Constitutes the formation of contract, scope of supply will be governed by the technical specifications & other terms & conditions of the aforesaid Tender Enquiry document and its amendments /corrigendum issued.
- 14. The Time lapse on the part of HSCC / KCGMC / on account of despatch clearance/installation clearance will not be count for delivery period /installation period.

15. Payment Terms:

- (i) 80% payment on submission of following document:-
 - Copy of Purchase order.
 - Consignee receipt in original issued by KCGMC/HSCC.
 - Invoice in favour of consignee through HSCC for 80% claim
 - Warranty Certificate.



- (ii) 20% payment within on submission of following documents:
 - Copy of Purchase order.
 - Copy Consignee receipt issued by KCGMC/ Client.
 - Installation & commissioning or final acceptance certificate issued by KCGMC/HSCC.
 - Invoice in favour of consignee through HSCC for 20% claim.
- 16. Supply shall be accepted only after inspection and approval by the concerned authority.
- 17. **Liquidated Damage**: If the supplier fails to deliver any or all the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser/Consignee may consider termination of the contract.
- 18. **Insurance:** The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner: The supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.

19. Termination of Contract

- 19.1 The Purchaser/Consignee, without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), may, by written notice terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser/Consignee
- 19.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to sub-clause 19.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement. Unless otherwise instructed by the Purchaser/Consignee, the supplier shall continue to perform the contract to the extent not terminated

20.0 Resolution of disputes

- 20.1 If dispute or difference of any kind shall arise between the Purchaser / Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.
- 20.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, such dispute or difference shall be referred to the sole arbitrator appointed by **Director General**



Medical Education and Research, Government of Haryana, Panchkula. The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award

- 20.3 Venue/seat of Arbitration: The venue of arbitration shall be at New Delhi, India.
- **21.0 Applicable Law and Jurisdiction:** The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force. The contract shall be subject to the jurisdiction of Delhi court to the exclusion of all other courts.
- **22.0 Delivery/Delay in the supplier's performance:** The supplier shall deliver of the goods and perform the services under the contract within the time schedule specified in the documents. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed not later than the date (s) as specified in the contract. Any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following actions:
 - (i) imposition of liquidated damages,
 - (ii) forfeiture of its performance security and
 - (iii) termination of the contract for default
- 23.0 The bid submitted by the bidder should be accompanied with Power of Attorney in favour of signatory of TE documents.
- 24.0 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.



TENDER FORM

Date:

To,

Chief General Manager, HSCC For & on Behalf of Director General Medical Education & Research (DGMER), Govt. Of Haryana, Panchkula

Ref. TE document no. Item no:-

We, the undersigned have examined the above mentioned TE document, including all amendment/corrigendum issued the receipt of which is hereby confirmed. We now offer to supply and deliver, installation, commissioning ________ (Description of goods and services) in conformity with your above referred document terms for the sum of ______ (NOT TO MENTION ANY PRICE DURING SUBMISSION IN TECHNICAL OFFER) ______ (total tender amount in figures and words), as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form.

We agree to keep our tender valid. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities.

We confirm that we fully agree to the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum if any

We are fully agreed all the terms and conditions of TE document including amendment/ corrigendum /technical specification issued before opening of bid. In case, anywhere any conditional terms found in our bid, the same shall be treated as deleted/cancelled/ withdrawn from our bid. Whenever there is a conflict, the acceptance of all terms and conditions of TE document in the tender form / affidavit shall prevail only.

(Signature with date)

(Name and designation) Duly authorised to sign tender for and on behalf of



Price Bid

Item no:

Name of item

| Sr no. | Description of Goods | Make | Model no. | Qty. | # Unit Price Rs. | VAT/Sales Tax extra % | Total Amount Rs. |
|-----------|-------------------------|------|--------------|------|---------------------|-----------------------------|---------------------|
| 1. | | | | | | | |

Note: 1. Sales tax/VAT should be mentioned separately.

2. # Unit price shall be included of all packing & forwarding, freight charges & insurance from ware house to consignee, local tax, entry tax, duties, two year warranty, VAT/ taxes and other levies payable by the supplier under the contract.

Authorised Signatory

PRICE SCHEDULE FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD

| 1 | 2 | 3 | 4 | | | | 5 | |
|-------------|--------------------------------------|------------------|-----------------|--|-----------------|-----------------|-----------------|--|
| Item no. | BRIEF DESCRIPTI ON OF GOODS | QUANTITY. (Nos.) | | omprehensive Each U ive of service 2 nd b | Jnit year wis | e* | | Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)] (Inclusive of service tax, VAT, Excise duty) INR |
| | DESCRIPTI QUANTITY. ON OF (Nos.) | | 1 st | | 3 rd | 4 th | 5 th | Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)] (Inclusive of service tax |

^{*} After completion of warranty period

Authorised Signatory



BANK GUARANTEE FORM

| To |
|--|
| HSCC (India) Limited E 6 (A), Sector -1, Noida |
| IFB No. Name of Item Item no. |
| WHEREAS (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no dated to supply (description of goods and services) (herein after called "the contract"). AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognised by you for the sum specified therein as security for compliance with its obligations in accordance with the contract; AND WHEREAS we have agreed to give the supplier such a bank guarantee; |
| NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of |
| We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand. |
| We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification. |
| |
| (Signature with date of the authorised officer of the Bank) |
| Name and designation of the officer |
| Cool name 0 address of the Doub and address of the Doub |
| Seal, name & address of the Bank and address of the Bran |



Technical Specification of Equipments

Item no 01

MICROPROCESSOR BASED SPECTROMETER

Monochromator- Littrow using 1200 L/mm holographic grating

Optical Bandwidth- 4nm

Wavelength Range -190-1100nm

Wavelength Accuracy- Better than ±1nm

Wavelength Reproducibility- 0.1nm

Self Test and Calibration- Automatic at switch on

Stray light - Typically less than 0.01% at 220nm and 340nm

Display Screen LCD- High resolution backlit with contrast control

Display Scrolling -Provides 6 screen widths for viewing plots etc.

Auto zero -Automatic by press button

Photometric Ranges- Digital display of -0.3-3A, 0-200%T, 0-9999C

Photometric Accuracy- ±0.005A or 1% whichever is greater

Photometric Noise- Less than ±0.0002A (500nm)

Stability - Better than 0.001A/hour at constant temperature

Multi-Wavelength Analysis- 2 and 3 wavelength methods.

Assay Program me-Enter multi-wavelength formula for automatic computation and formatting of any assay

Curve Fitting and Editing- Linear, quadratic or cubic; up to 30 standards **Cell and Wavelength Programming**- Up to 8 cells and 10 wavelengths combined

Method Storage - Up to 30 methods stored in protected memory

Absorbance Ratios- 260/280nm or two selected wavelengths

Peak Seek -Automatic search programme, baseline corrected

Reaction Kinetics- Tabulation of results, reaction plots, reprocessing

Batch Sampling -100 samples, internal control, screen display

Real Time Clock- Timed and dated reports

Computer/printer interfaces- Bi-directional serial RS232 and USB ports

Sample -Temperature Displayed and set from keyboard

Accessories-

1. One pair 10mm path length 3.5ml and 1ml Quartz cuvette

Item no02

CONTACT MICROHYSTROSCOPE

- Examination and Hysteroscope with Forward Oblique Telescope 30 deg, enlarged view, magnification 1x 50x or more, Autoclavable Diameter 2.9mm/2.7 Length 30 cm. Fiber Optic light transmission incorporated Color Code: Red 1 No
- Examination sheath, ø 3.8 mm, with 1 LUER-Lock adaptor, for use with CF-Examination sheath – 1 No
- Cont.-Flow Examination sheath, ø 4.5 mm, with 1 LUER-Lock adaptor, for use with examination sheath 1 No
- Operating Sheath, size 4.3mm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use with CF operating sheath 1 No
- Continuous-Flow Operating Sheath, size 5.mm, with 1 stopcock and 1 LUER-



- Lock adaptor, for use with operating sheath 1 No
- Biopsy and Grasping Forceps, double action jaws, semirigid, 5 Fr., length 34 cm
 1 No
- Scissors, blunt, single action jaws, semirigid, 5 Fr., length 34 cm 1 No
- Ball Electrode, unipolar, 5 Fr., length 53 cm 1 No
- Monopolar High Frequency Cord with 4 mm plug for HF-unit, length 300 cm –
 1 No
- Working Element Set 1 SET consisting of:
 - 1 Working element the thumb support is movable. In rest position the electrode tip is inside the sheath
 - 1 Cutting Loop, angled
 - 1 Coagulating-Electrode, ball end, ø 3 mm
 - 1 Coagulating-Electrode, ball end, ø 5 mm
 - 1 Coagulating Needle Electrode, angled
 - 2 High Frequency Cord
 - 1 Protection Tube, for for sterilization and storage of electrodes, curettes and knives
- Resectoscope Sheath including connecting tubes for in- and outflow, for continuous irrigation and suction, ø 8 mm, oblique beak, rotatble inner sheath with ceramic insulation, for use with working elements – 1 No
- Standard Obturator, for use with resectoscope sheaths 1 No
- Cold Light fountain LED 300 watt / Xenon 300 watts 01 nos
- Should be a Compact and lightweight design with manual light intensity control Color Temp 3400k or more with 1 light outlet
- Certified to: IEC 601-1. CE acc to MDD protection class 1/CF, CE acc. to MDD, protection class 1/BF
- Fiber Optic Light Cable, Diameter 3.5mm, Length 180cm 1 No

Added: This V.D.U. Hysteremat should be compatible Hysteroscope

Item no.03, NST Machine with TOCO

AC supply voltage and fuse values

1. Rated AC supply voltage: 240V, 50Hz/60Hz, maximum rating 30VA Printer

High-resolution 5" chart printer with automatic annotation, signal loss, date, time and chart speed. Dot matrix thermal, 1024 elements. Print width 128mm.

- 1. Paper type: Heat-sensitive z-fold plain coated paper
- 2. Paper length: 45m per pack, representing 75 hours at 1 cm/min or 253 cm/min
- 3. Chart speeds: 1, 2, 3 cm/min and fast feed
- 4. FHR scale (user selectable): 30-240 bpm (30 bpm/cm) or 50-210 bp
 Display 5.2" Transmissive LCD with CCT backlight, displaying monitored parameters, interactive messaging and menus.
- 1. Resolution: 240 x 64 pixels
- 2. Display modes: Alphanumeric or Scrolling Trace
- 3. Displayed parameters: Singleton and Twin FHR (Ultrasound), TOCO



Ultrasound Transducer Type wide-angle multi-crystal monitoring transducer, watertight, with clip for attaching patient belt. Pulsed Doppler system with directional facility.

- 1. Protection category: B or equivalent
- 2. Operating frequencies: 1.5 MHz (yellow), 2MHz (Blue)
- 3. Accuracy: ± 1 bpm over the range 100-180 bpm
- 4. Protection against water: IPX7

Ultrasound Transducer Acoustic Output

- 1. Peak negative pressure: < 1Mpa
- 2. Output beam intensity: < 20mW/cm 2

3.

Contractions (external Toco)

guard-ring tocodynamometer with clip for attaching patient belt. Auto- zero and Manual zero.

1. Protection Category: B or equivalent

Fetal Movements

Recorded either by patient operating event marker or, automatically using the Actogram feature. This records fetal limb and trunk movements via the ultrasound transducer.

CTG Analysis

Minimum 5 hour Memory of traces with fast printing facility. FHR Alarm

Audible and visual alarms are user selectable for High

(Tachycardic) FHR, Low (Bradycardic) FHR& Signal Loss (LOC)

Trace Annotation

Interfaces An RS232 interface for a reliable wired connection with central connection in future centralized reviewed.

Safety Equipment should be designed to meet the medical electrical safety standards, IEC 601-1:1998 and EN 60601-1-2: 1993.

Equipment should be US-FDA approved / European CE Certified

Item no.04, CTG machine

- 1. 5" or more High tech color TFT screen with tilt adjustment up to 90 degree,
- 2. Twin fetus monitoring module as standard feature,
- 3. FAS-Fetal acoustic stimulator facility,
- 4. Advanced digital signal processing, (DSP) technology,
- 5. Automatic fetal movement detection,
- 6. Automatic CTG Reporting
- 7. Highly sensitive 9 or more elements transducer for FHR detection, effective 1 Mhz pulse Doppler transducer. FHR,Toco & FM parameters with waveform display & digits display simultaneously. Basic parameters: FHR, Toco, AFM, Event marker. Special patient event marker and clinical event marking button.
- a) Should have provision for recording FHR (Fetal Heart Rate)
- b) Should have provision for recording intrauterine pressure (direct) through pressure tip transducer.



- 8. Real time accurate & reliable results, To be provided with Retractable in built long life high resolution thermal printer, High speed print out for stored data on paper

 Paper
- 09. Patient storage data of 24 hours with playback and printing facility.
- 10. High performance re- chargable Li-ion battery with 2 hours back up.
- 11. Special high sensitive water tight probe.
- 12. No maintenance due to wide range of applying voltage (100-240v)
- 13. alarm on abnormal fetal heart rate
- 14. Easy to read on screen access with scrolling function to be provided with following accessories
 - -fetal probe
 - -twotoco probe
 - -1event marker
 - -1 print paper
 - -2 packs power adoptor and cord
 - -1 ultrasound gel
 - -2 probe belts
 - -1 acoustic vibrator
 - -1 rechargeable battery
 - -1 set trolly to keep the machine

Equipment should be US-FDA approved / European CE Certified