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**INVITATION FOR BIDS (IFB) – AMENDMENT NO: 1**

Sub: Amendment No: 1- Supply, Installation, Testing and Commissioning of EEG Machine and accessories at Diagnostic lab facility, Gurugram as per the tender specifications

Ref: Our IFB Ref No: HLL/CHO/PROJ/HCS/MCG-EQP/EEG/19-20 dated 12-07-2019

**Amendment Date: 25-07-2019**

With reference to the above, the scheduled date for receipt and opening of bids is hereby amended as follows.

- a) Date of issue of tender document - 12-07-2019 onwards
- b) Last date and time for receipt of bids - 02-08-2018 up to 15.00 Hrs.**
- c) Date and time of opening of bids - 02-08-2018, 15.30 Hrs.**

Additionally, Specifications in the tender are amended as follows:

## SCHEDULE II - Amended

### SPECIFICATIONS

**Sub:** Supply, Installation, Testing and Commissioning of EEG Machine and accessories at Diagnostic lab facility, Gurugram – reg.

**Item Name: EEG Machine with accessories**

**Quantity: 1 Nos.**

#### Technical Specifications

1. Should be a 32 Channel digital EEG Machine, where 24 Channels for acquisition and storage, 5 Polygraph Channels and 3 DC Channels.
2. Frequency response should be 0.05 Hz to 70Hz.
3. Should have facility to view all channels in different montages during acquisition and review.
4. Should have split screen facility to study and even carefully during acquisition, where data storage should be on going in hard disk.
5. Should have split screen facility in analysis to compare the data of same time or different times with individual selection of filters, sensitivity, montages etc.
6. Should have the facility for simultaneous acquisition and review of same record.
7. Should have the facility to mark pages / important events for printing in review.
8. Should have user definable photic stimulator protocol execution with display of photic marks on screen using LED or Xenon flash lights
9. Should have unlimited Montage Reformatting.
10. Should have HLF (15, 35, 70 Hz) and LLF (0.1, 0.3, 1.5, 3, 5 Hz) filters for each channel as well as for all channels for display.
11. Should have the facility for sweep speed selection.
12. Should have the facility to display traces with limit trace.
13. Should mark and annotate standards events such as Eyes open, Eyes closed, Hyperventilation on, Hyperventilation off, Artifact, and other user defined events of max. 50.
14. Should have separate sensitivity control for each channels as well as for all channels.
15. Should have the facility to enter patient details such as ID, Name, Referred By, Sex, Age, Patient History, Address, Doctor Name etc.
16. Should have the facility to review of selected patient form list, to sort data according to patient name, sex, age, test date etc, review another patient while acquisition and to edit the patient details.
17. Should have the facility to browse page by page, Scroll in forward and reverse direction and the speed of scrolling can be different speed levels such as same acquisition speed, 2 times, 3 times , 4 times the acquisition speed.
18. Should have user definable protocols for acquisition.
19. **EEG pages should be displayed in BRAIN MAP montage and it should have the facility to view Amplitude brain map, Progressive amplitude brain map,**

- frequency brain map, progressive frequency brain map, 4 bands frequency brain map with frequency spectrum, 5 bands frequency brain map with frequency spectrum, 4 bands frequency brain map with EEG & 4 bands frequency brain map with EEG in review mode.**
20. Should have the facility to edit current page events, browse all the marked events. Display the page having the selected event, to store any number of marked EEG pages on another HDD.
  21. Should have the facility for spike detection with amplitude greater than or equal to the specified amplitude and within specified duration.
  22. Should have the facility to print all marked EEG pages / Brain map pages in queue.
  23. Should have the facility to edit and print summary report, EEG page and Brain map page.
  24. Should have Acquisition Hot keys for Sensitivity for all traces, Eyes open, Eyes close, Hyperventilation ON, Hyperventilation OFF, Mark page, Artifact, Annotated event, Toggle pause / Release pause, Snap shot mode, photic stimulation etc.
  25. Should have Review Hot Keys for page mode, scroll mode, flip mode, next page, increase speed, mark page for printing, forward direction, reverse direction, previous page, decrease speed etc.
  26. Should have an efficient data base management including Hospital details, Reference doctors list, standard comments for summary report etc.
  27. Photic frequency should be 1-30 Hz, Stimulating time 1-16 sec and pause time 1-16 sec.
  28. CMRR should be greater than 100 db and input impedance should be greater than 10 M Ohms.
  29. Should operate from 200 to 240Vac, 50 Hz input supply.
  30. Should have a high resolution low light video camera.
  31. Should have infra red camera for night VEEG recording facilities.
  32. Should have facility to upgrade EEG to sleep system in future.
  33. Should be supplied all necessary accessories including EEG Disc Electrodes reusable – 1 set, EEG Paste – 5 Jar / sufficient quantity for 100 EEG Cases, Head Cap for Adult, & Infant – 1 each.
  34. Should be supplied with a PC of adequate configuration having HDD of storage not less than 360 GB HDD, DVD/CD writer and a Colour Printer.
  35. Monitors provided along with PC should be LCD / TFT and Colour Printer should be Colour Laser Printer.
  36. **Should supply online UPS of sufficient capacity with 1 hour backup to connect the medical equipment except Computer System, Colour Laser Printer.**
  37. Should be supplied with a suitable Table/Trolley for keeping the equipment, PC, Printer and all the accessories.
  38. Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and functional safety test report from ERTL. Copy of the certificate / test report shall be produced along with the technical bid.
  39. Warranty of at least 2 YEARS.

**GENERAL CONDITIONS**

1. The equipment should be complete with all accessories and interconnections.
2. The purchaser will be providing the required electrical supply to the equipment. All wiring requirements within the equipment are to be provided by the supplier as per standard.
3. The suppliers should submit 3 copies of the following documents, relevant to their scope of supply, along with delivery & commissioning of the Unit :
  - a) Relevant Test Certificates, Operation & Maintenance Manual, Installation Manual, Troubleshooting Manuals, Guarantee Certificate
  - b) Any other related documents
4. Any deviations from the bid documents shall be clearly indicated.
5. The bid should be complete with all the relevant details.

All other terms and conditions of the tender remain unchanged.

**SENIOR MANAGER (PROJECTS)**