

| S. No. | Equipment | Specifications |
|--------|-----------------------|--|
| 1 | HRV Testing Equipment | <p>HRV Testing Machine : Technical Specifications</p> <ol style="list-style-type: none"> 1. Inbuild Multichannel Bio-amplifier with electrodes (ECG, EMG, EEG, EOG, EGG, etc.) 2. Should have at least 4 channels or more. 3. Range: +2mV to +10V and variable and a high sampling rate of 400 KHz (aggregate speed). 4. ADC resolution: 16 bits on all gain ranges. 5. Transducers for recording of Blood Pressure, Heart sound, Heart rate, Pulse and Arm Plethysmography, Respiration Rate, Stethography, Hand grip test, and Reflex tendon hammer and reaction times. 6. Balance board for static posturography and communicate with the same software for analysis and recording. 7. Forearm Plethysmograph for forearm Plethysmography on the same software. 8. The system should be able to record and analyze: <ol style="list-style-type: none"> a. Pulse, Respiration, blood pressure, bio potentials, ECG recording multi leads facility along with Cardiac Axis analysis and vector analysis b. Dynamometer to study handgrip strength profile. c. Study Reaction Time, Pulse Transit Time, and Peak waveform Analysis. 9. Provided with built-in Isolated Current Stimulator at least Output current: 0-20 mA with software Selectable Pulse Rate, duration, amplitude, Delay, etc. 10. The software should provide step-by-step instructions, protocol, and experimental design for performing various experiments in physiology teaching applications. 11. The teaching software must be capable of running several applications simultaneously within one program including data collection, background materials, data analyses, and reporting options. 12. It must allow editing control of the recorder settings on the hardware. 13. It must allow students to save their laboratory progress and PDF reports of their data. 14. Lesson authoring/editing service must include content including predeveloped experimental protocols, background information on each experiment, transducer setup and data acquisition settings, and example data as per requirement of the department. 15. Ability to automatically calculate the frontal plane of ECG's and vector cardiograms. It should also animate the instantaneous cardiac axis and vector display. 16. Online and offline Heart rate variability analysis in the time domain and frequency domain 17. 500 disposable compatible surface electrodes & 500 alcohol swabs 18. Ability to undertake online and offline analysis with various export options like Binary, Axon, IGOR, MATLAB, Excel, Graph Pad Prism, Quick Time, Wav, Text, etc. 19. The system should be supplied with desktop computers with i5, 1TB with the compatible printer with and 21-inch LED monitor with stand and other required accessories. 20. ISO & IEC and other safety standards must be provided. 21. The system should be adequately electrically grounded on-site at the time of its installation. |

