1. Clinical & Diagnostic Assessment Equipment

Neurocognitive Testing:

- Computerized cognitive assessment systems for memory, attention, reaction time, and processing speed

- Paper-based neuropsychological test kits for baseline and follow-up evaluation

Neurological Examination Tools:

- Reflex hammer

- Tuning forks (128 Hz)

- Sensory pinwheel

- Monofilament sets for nerve sensitivity

- Goniometer for joint range of motion

- Inclinometer for spinal curvature measurement

Posture & Movement Analysis:

- Posture grid wall with plumb line

- Force plate or balance platform for postural sway analysis

- Gait analysis mat to measure stride length, cadence, and pressure

- 3D motion capture system for advanced kinematic analysis

2. Neurophysiological Recording & Monitoring

Electroencephalography (EEG):

- Multichannel EEG machine (16–32+ channels)

- Dry or wet electrode systems

- EEG caps for different age groups

- EEG software with real-time monitoring, artifact rejection, and optional qEEG analysis

Electromyography (EMG) & Nerve Conduction Study (NCS):

- EMG/NCS system for muscle and nerve testing

- Stimulating electrodes

- Recording electrodes

- Ground electrodes

Evoked Potentials (Advanced Optional):

- Visual Evoked Potentials (VEP)

- Brainstem Auditory Evoked Responses (BAER)

- Somatosensory Evoked Potentials (SEP)

3. Neurostimulation & Rehabilitation Devices

- Repetitive Transcranial Magnetic Stimulation (rTMS) device for depression, TBI, and stroke recovery

- Transcranial Direct Current Stimulation (tDCS) devices (portable or clinic-grade)

- Neuromuscular Electrical Stimulation (NMES) units for motor strengthening

- Functional Electrical Stimulation (FES) systems for gait and limb rehabilitation

- Vagus Nerve Stimulator (VNS) systems for epilepsy and depression (hospital-grade use)

4. Sensory Integration & Neurofeedback Tools

- EEG-based neurofeedback systems with real-time brainwave training software

- Virtual Reality (VR) rehabilitation setup including headset and cognitive-motor rehab software

- Balance and vestibular rehabilitation tools such as balance boards, foam pads, BOSU balls

- Computerized posturography systems (advanced)

5. Cognitive & Behavioral Therapeutic Tools

- Computer-based cognitive therapy programs

- Memory training software

- Attention and processing speed therapy modules

- Speech and language therapy software

6. Rehabilitation & Exercise Equipment

Motor Rehabilitation:

- Resistance bands

- Stability balls

- Adjustable dumbbells

- Cable pulley machines

Coordination & Balance Training:

- Agility ladders

- Mini hurdles

- BOSU balance trainers

Fine Motor Rehabilitation:

- Pegboards

- Hand therapy putty

- Finger exercisers

7. Support & Clinic Infrastructure

Furniture & Setup:

- Adjustable therapy chairs

- Recliners

- Treatment tables

Data Management:

- Computers and monitors

- Electronic Medical Record (EMR) software

- Secure cloud storage and backup

Safety & Hygiene:

- Hand sanitizers

- Medical-grade disinfectants

- Disposable electrode covers and consumables

8. Licensing, Compliance & Safety Requirements in India

- Clinical Establishment registration

- Biomedical waste management contract

- Fire safety and building compliance approvals (where applicable)

- Patient consent forms for therapy and digital data

- Data privacy compliance under IT laws

- Display of practitioner qualifications and licenses

9. Approximate Budget Estimation

- EEG systems: INR 3,00,000 – 12,00,000

- EMG/NCS systems: INR 2,50,000 – 8,00,000

- TMS systems: INR 12,00,000 – 40,00,000

- tDCS devices: INR 50,000 – 2,50,000

- VR rehabilitation setup: INR 1,50,000 – 5,00,000

- Balance and gait systems: INR 50,000 – 4,00,000

- Rehabilitation tools: INR 20,000 – 1,50,000

- Clinical furniture and IT infrastructure: INR 1,00,000 – 3,00,000

Estimated total setup cost ranges from INR 7,00,000 to INR 1,20,00,000+ depending on scale and technology level.

10. Equipment Selection Guidelines

- Use medical-grade certified equipment

- Ensure availability of warranty and on-site service

- Select devices with training and technical support

- Prefer scalable systems with software upgrade options

11. Typical Neurotherapy Lab Workflow

1. Patient intake and medical history

2. Neurological and cognitive assessment

3. EEG, EMG, gait, and movement analysis

4. Diagnosis and neurotherapy planning

5. Therapy sessions including stimulation and rehabilitation

6. Progress monitoring and documentation

7. Follow-up assessment and long-term care planning

12. Future Advanced Lab Enhancements

- MRI and fMRI integration

- Brain–Computer Interface (BCI) systems

- AI-assisted neurological diagnostics

- Intraoperative neuro-monitoring systems