## STATE COUNCIL OF MEDICAL SCIENCES ODISHA



# CERTIFIED EEG TECHNICIAN (CEEGT)

## CERTTIFIED COURSE IN EEG TECHNICIAN

This course is of 6 months duration, After 6 months of Theory, Practical & Clinical classes, students have to appear one Final exam at the end to obtain the certificate(CEEGT). Final examination will be held at the end of 6<sup>th</sup> month. To obtain the certificate the student has to secure 50% of the total mark. Theory class attendance of 75% & Practical class attendance of 85% is mandatory to appear the final examination.

#### **EXAMINATION PATTERN:**

Theory	40
Clinical& Practical	50
Internal Assessment	10
	Total 100

Theory ----hrs

Sl. No	Topic		
51. 140	Topic	Estimate	
		d Hrs	
	Study of General Anatomy and Physiology of Human Body	u IIIs	
1	Study of General Finations, and Hysiology of Haman Body		
	NEURO-ANATOMY:		
2	Muscle: Origin, insertion, nerve supply, structure		
	Nerve : Course-cranial and peripheral, structure		
	NEURO-PHYSIOLOGY:		
3	Muscle: Functions of muscles,		
	i. Muscle contractions		
,	ii. Electrical properties of muscles		
	Nerve: Functions of nerve		
	i. Electrical properties of nerve.		
	ii. Nerve conduction.		
	iii. Neuromuscular junction and		
	iv. Neurotransmitters		
	NEURO-PATHOLOGY:		
4	Muscle: Pathological changes in muscles		
	i. Primary muscle disease		
	ii. injury		
	iii. Metabolic		
	iv. Inflammatory		
	v. Others		
	vi. Neurogenic muscle involvement		
	vii. Neuromuscular junction abnormalities		
	Nerve: Pathological Changes in nerve		
	i. Demyelination		
	ii. Axonopathy		

5	(A) Seizure disorder and its differential diagnosis		
	(B) Normal EEG pattern in		
	i)Children and adult,		
	ii) Awake and sleep.		
	iii)Neonantal EEG		
	iv) Normal variants		
	v)Artifacts: Eye movements, muscle pulse		
	vi) Activation methods: -Hyperventilation,		
	-Photic stimulation,		
	-Sleep deprivation,		
	-others		
	(C)Abnormal EEG records,		
	i. Definition		
	ii. Spike, sharp, slow waves,		
	iii. Other abnormalities		
	iv. Abnormal EEG in neurological diseases		
	v. Brain death		
	(a) Disease affecting cranial and peripherals		
6	a. Bells play		
	b. Peripheral neuropathy		
	c. Entrapment neuropathy		
	(b) Basic principles of nerve conduction study (NCS)		
	(i) Motor Nerve Conduction Studies		
	(ii) Sensory NCS		
	a. H-reflex		
7	b. Blink reflex and others		
	c. Repetitive nerve stimulation		
	d. Abnormalities indisease		
	e. Central motor conduction		
	f. Polysomnographic studies — Normal sleep and		
	Sleep disorder (in brief)		

### **PRACTICALS**

- a. Different parts of EEG machine and its functions, i.e. montage, electrodes, filter, calibration, sphenoidal electrode, depth electrodes.
- b. Electroencephalographic monitoring (Both indoor patients and ambulatory),
- c. Video Electroencephalography,
- d. Intraoperative Records
- e. Quantitative Electroencephalography
- f. Brain mapping and others (in brief).
- g. Electroencephalographer 's reporting
- h. Record keeping.

Theory – 250 Hrs.

Practical / Clinical – 350 Hrs.

Total -600 Hrs. of classes At the end of  $6^{\rm th}$  month final exam will be held. A candidate has to secure 50% to get the certificate of (CEMGT) Distribution of Marks

Theory – 40

Clinical / Practical - 50

Internal Assessment – 10

Total - 100

