Content of the Examination

- 1. The Registration Examination for Electroencephalographic Technologists is a computer based examination composed of multiple-choice, objective questions with a total testing time of our(4) hours.
- 2. The content for the examination is described in the Content Outline.
- 3. The questions for the examination are obtained from individuals with expertise in electroencephalography and are reviewed for construction, accuracy, and appropriateness by ABRET and PTC
- 4. ABRET, with the advice and assistance of the Professional Testing Corporation, prepares the examination.
- 5. The Registration Examination in Electroencephalography Technology will be weighted in approximately the

following manner: I. Pre-Study/Patient Preparation......25%
II. Performing the Study......75%

Content Outline

- I. Pre-Study/Patient Preparation
- A. Planning and preparation
 - 1. Elements of a history/communication, establishing rapport
 - 2. Medical/EEG terminology; related diagnostic procedures
 - 3. Common medications/treatments
 - 4. HIPAA
 - 5. Neurologic disorders
 - a. Neuropathology (tumors, encephalopathy, vascular, etc.)
 - b. Seizures (classification, clinical manifestations, syndromes, etc.)
 - 6. Neuroanatomy/Neurophysiology
- B. Fundamental Concepts
 - 1. Electrode properties, placement/10-20 System, special electrodes
 - 2. Obtaining acceptable impedances
 - 3. Infection control (patients, equipment, electrodes, etc.)
 - 4. Allergies and sensitivities
 - 5. Related SDS/OSHA standards
 - 6. Patient safety/Electrical safety
 - 7. ABRET Code of Ethics

- II. Performing the Study
- A. Ensure Integrity of Data
 - 1. Documentation
 - 2. Monitoring techniques (age specific, state specific)
 - 3. Recording strategies (montages, parameter changes)
 - 4. Digital instrumentation (filters, etc.)
- B. Recording Strategies
 - 1. Effects of medications on the recording
 - 2. Activation techniques/contraindications to activation
 - 3. Identifying, eliminating/monitoring artifacts
 - 4. Troubleshooting
 - 5. Managing clinical events
- C. Waveform Identification
 - 1. Sleep stages and patterns; sleep disorders
 - 2. Correlation of history with EEG patterns/clinical correlation
 - 3. Normal variants
 - 4. Normal/Abnormal adult EEG
 - 5. Normal/Abnormal pediatric EEG
 - 6. Normal/Abnormal neonatal EEG
 - 7. ACNS Guidelines and terminology
 - 8. Electrographic correlates to clinical/non-clinical entities
- D. Analysis
 - 1. Localization and polarity
 - 2. Measurement of frequency, voltage and duration
 - 3. Waveform analysis and identification/Pattern description
 - 4. ECI recordings and Guidelines

Sample Questions

- 1. The **MOST** appropriate time constant for recording a low voltage slow wave focus is:
 - A. 0.012second
 - B. 0.05second
 - C. 0.12second
 - D. 1.00second
- 2. Which of the following typically produces diffuse slowing on the EEG?
 - A. Meningioma
 - B. Cerebral abscess
 - C. Meningitis
 - D. Cerebral thrombosis
- 3. Which of the following is a characteristic feature of the EEG in narcolepsy?
 - A. FIRDA
 - B. REM onset sleep
 - C. An increase in EMG
 - D. Diffuse delta slowing