Parameters	Waking State	NREM State	REM State	TC state
Electroencephalograph (EEG)	Fast, mixed frequencies with low-amplitude	Large amplitudes and very low (delta) frequency waves	A close resemblance to the waking state.	Global high amplitude and coherence alpha with some frontal and central theta and beta spindle bursts.
1)Delta : 0.5-4 Hz 2)Theta: 4-7.5 Hz 3) Alpha1: 8–10 Hz 4) Alpha2: 10–12 Hz 5) Beta: 13–20 Hz 6) Gamma: 20-50 Hz	 Alpha 2 Beta Gamma	**Stage 3**: Delta (0.5-2 Hz) > 20-50 % **Stage 4**: Delta (<1 Hz) > 50 % Occasional alpha and theta	 Theta (3.5-7.5 Hz) with saw tooth waves Alpha 1 & 2 (8–12 Hz) Beta (13-20 Hz) Gamma (40 Hz)	 Primarily Alpha 1 (around 8-10 Hz) alternating with some theta Very little beta Very little gamma
Eye movement (EOG)	Frequent	Slow or absent	Frequent	Variable
Muscle tone (EMG)	Elevated (high or moderate)	Decreased	Muscular atonia (active inhibition)	Greatly reduced
Autonomic measures 1) Breath rate 2) Heart rate 3) Skin conductance 4) Body temperature	 1) Average 2) Average 3) Average 4) Average	 1) Decreased breath rate 2) Decreased heart rate 3) Decreased skin conductance 4) Decreased temperature	 1) More rapid, irregular, and shallow breathing 2) Increased heart rate 3) Skin conductance more stable than sleep 4)Increased temperature	 1) Slowing of rate and Spontaneous respiratory suspensions (1 to 60 sec) 2) Decreased heart rate 3) Basal GSR increase, phasic GSR more stable Skin conductance increase (‘orienting’) at the onset of breath changes 4) Decreased temperature

Brain States—EEG, EOG, EMG, and Autonomic patterns

Note: NREM or slow wave sleep stages 3 & 4; EEG, electroencephalogram; EOG, electrooculogram; EMG, electromyogram.

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