Self-Assessment – Sleep Apnea

1. How many stages of sleep are there? 5 (4 + REM)

2. Which stage of sleep is associated with REM sleep? STAGE 5

3. What does REM stand for?
   A. R RAPID
   B. E EYE
   C. M MOVEMENT

4. Define Hypopnea. DECREASED RATE AND DEPTH OF BREATHING.

5. Explain each of the following:

   a. EEG: ELECTROENCEPHALOGRAM; MONITORING OF BRAIN WAVES. USED TO DETERMINE STAGE OF SLEEP.

   b. EOG: ELECTROOCULOGRAM; MONITORING OF EYE MOVEMENT. USED TO DETERMINE PRESENCE OF REM.

   c. EMG: ELECTROMYELOGRAM; USED TO MEASURE THE MOVEMENT OF THE LIMBS.

   d. ECG: ELECTROCARDIOGRAM; USED TO MEASURE THE HEART RATE AND TO ALERT TECHNICIAN TO LETHAL DYSRHYTHMIAS.

6. Describe a polysomnography study. What is monitored? OVERNIGHT TEST DONE IN A SLEEP CLINIC. USUALLY TAKES 6 ½ TO 7 HOURS. PATIENTS ARE VIDEO TAPED AND HAVE THE FOLLOWING MONITORS: AIR FLOW (NASAL & MOUTH), PULSE OXIMETRY, ECG, EOG, EEG, EMG, BODY POSITION, CHEST WALL MOVEMENT.

7. A cessation of airflow at the nose & mouth, no inspiratory efforts and O_2 desaturation describes
   A. Hypopnea
   B. OSA
   C. CSA
   D. Mixed Apnea

8. The most common treatment of obstructive sleep apnea is? CPAP

9.   All the following are possible treatments of obstructive sleep apnea **EXCEPT** for:

   A.   Weight Reduction
   B.   Oxygen therapy
   C.   Tracheostomy
   D.   Negative Pressure Ventilation
   E.   UPPP

10.   When monitoring the apnea index, how many periods of apnea per hour are considered a significant finding? GREATER THAN 10-15 PER HOUR

11.   Which of the following are characteristic of REM sleep (circle all that apply)

ALL BUT…

   A   Rapid and irregular respirations
   B.   Sleep starts
   C.   Cardiac dysrhythmias
   D.   Sleep talking
   E.   Loss of muscle tone

12.   In hours, what is the minimal amount of time needed to do a sleep study?
   6 ½ TO 7 hours

13.   What is Inductive plethysmography? TECHNOLOGY USED TO MEASURE RESPIRATORY EFFORT. A BAND OF TRANSDUCERS ARE PLACED AROUND THE CHEST WALL AND AROUND THE ABDOMEN. THE TRANSDUCERS SENSE CHEST WALL OR ABDOMINAL MOVEMENT. THESE MEASUREMENTS ARE USED TO DETECT AND MEASURE RESPIRATORY EFFORT.

14.   What is Pickwickian Syndrome? A TYPE OF OBSTRUCTIVE SLEEP APNEA CHARACTERIZED BY OBESITY, EXCESSIVE DAYTIME SLEEPINESS, SLEEP APNEA, REDUCED TIDAL VOLUMES, AND CHRONIC VENTILATORY FAILURE WITH A BLUNTED RESPONSE TO HYPOXIA.

15.   Identify the type of sleep apnea listed below OBSTRUCTIVE SLEEP APNEA