SAFER Post Test – Answer Key

1. Process S reflects:
   a. The somnolence drive and is highest at 4 AM
   b. The sleepiness drive and increases as time awake increases
   c. The status drive and increases as melatonin levels decrease
   d. The serotonin drive and increases as stress levels decrease
   e. The sensory drive because it decreases as sensory stimulation decreases

2. The circadian rhythms of temperature, short term memory, cognitive performance and subjective alertness:
   a. All reach a low in the early morning hours
   b. Are lowest in the mid-afternoon post lunch period
   c. Are driven by the temperature rhythm, with the other rhythms reaching a low at noon
   d. Are rarely in synchrony, leading to poor judgment at mid-morning
   e. Have no relationship to each other

3. In studies of vigilance tasks during chronic sleep restriction, 12 days with no more than 4 hours of sleep per night is equivalent to:
   a. 12 days of total sleeplessness
   b. 12 days with no more than 6 hours of sleep per night
   c. 4 days missing 1 hour of sleep per night
   d. 3 days with no more than 4 hours of sleep per night
   e. 3 days of total sleeplessness

4. During chronic sleep restriction, performance score decreases:
   a. Are always tightly correlated with subjective sleepiness estimates
   b. Reach a stable level after 2 days of sleep restriction
   c. Are not associated with a similar level of subjective sleepiness increases
   d. Lag behind increases in subjective sleepiness estimates
   e. Are random over time
5. On average, medical residents asked to complete the Epworth Sleepiness Scale score:
   a. Higher than any known sleep disorder
   b. Well within the normal range
   c. At a level similar to patients with insomnia
   d. In the abnormal range
   e. Fully alert at all times of day

6. In a research study using a vigilance task, scores after 7 days of having sleep restricted to 3 hours per night:
   a. Were better in older subjects than in younger subjects
   b. Reached a plateau at 3 days
   c. Were the same in younger subjects as at baseline
   d. Reached a plateau in younger subjects but not in older subjects
   e. Showed no age differences

7. Medical residents:
   a. Appear to be immune to sleep disorders
   b. Have a high prevalence of insomnia but rarely have other sleep disorders
   c. Are not immune to sleep disorders
   d. Have sleep disorders but they don’t result in sleepiness due to high stress levels
   e. Rarely have risk factors for sleep apnea such as obesity

8. One strategy for reducing or eliminating negative associations with the bedroom is to:
   a. Watch sports or game shows but not crime dramas in the bedroom
   b. Keep a night light on in the bedroom
   c. Use the bedroom only for sleep
   d. Take a bath prior to bedtime
   e. Eat a favorite food in the bedroom prior to sleeping

9. Caffeine:
   a. Has little or no effect on performance
   b. Is an excellent stimulant because tolerance is not a problem
c. Has been shown to reduce performance errors at night in shift workers
d. Can be used at high doses without significant side effects
e. Has a short half life and can be used just before bedtime with no significant effects on subsequent sleep

10. Taking a nap prior to a night shift:
   a. Results in lingering grogginess and poor performance
   b. Has no effect on subsequent performance
   c. Improves performance in the first 2 hours of shiftwork but not after that
   d. **Improves performance throughout the night shift**
   e. Worsens performance in the first 3 hours but then improves performance