Student Learning Outcomes/Review Sheet for Exam #5 (CNS)

By the completion of this unit, the student will be able to do the following:

1. Discuss the location and functions of the main parts of the brain.
   a. Thalamus
   b. Cerebrum
   c. Cerebellum
   d. Brain stem
   e. Medulla oblongata
   f. Pons
   g. Hypothalamus

2. Identify briefly the signs and symptoms of the following conditions and the drug therapy used:
   a. Depression
   b. Anxiety
   c. Parkinson’s Disease
   d. Mania
   e. Bipolar Disorder
   f. Schizophrenia
   g. Sedative-hypnotics

3. Identify the neurotransmitters (NT) involved with each of the conditions mentioned above and if the NT is at an increase or decrease.

4. Discuss what condition a patient has based on common symptoms and make educational decisions as to what medication should be administered.

5. Describe the different types of seizures and their drug therapy. Concentrate mainly on the drug of choice.

6. Identify specifics of the following drug classes: 1) MOA, 2) Identify what CNS conditions they treat: uses, 3) side effects, and 4) important characteristics for each:
   a. Benzodiazepines
   b. Barbiturates
   c. Anti-psychotics
   d. Anti-depressants
      1. TCAs
      2. MAO Inhibitors
      3. SSRIs
      4. Miscellaneous
   e. Anti-anxiety
      - Buspar®
   f. Anti-Parkinson’s
      - Eldepryl®
      - Sinemet®
   g. Anti-seizures
   h. Atypical Antipsychotics vs. Typical Antipsychotics

7. Discuss the relationship with PAIN and nerve impulses.

8. Describe the differences between Narcotics and Non-narcotics.

9. Match drug name to classification.
10. Define Gout and therapy – Define Gout. Identify what causes Gout. Discuss what is allopurinol’s and colchicine’s role in Gout therapy.

11. Discuss the characteristic side effects of narcotic analgesics.

12. Differentiate between narcotic agonist, partial antagonist, and pure antagonist and their drug examples.

13. Identify combination narcotics and non-narcotics (generic and brand name).

14. Identify which drugs have a hang-over effect.

15. Recall the following drugs and drug classes:
   a. selegeline (Eldepryl®)
   b. TCA’s (in general)
   c. Benzodiazepines (in general)
   d. Atypical antipsychotic - Zyprexa®
   e. Sinemet® - Clozaril®
   f. Lithium® - Risperdal®
   g. Buspar®

   *Again, focus on the MOA, main uses, side effects, key important characteristics and patient counseling (teaching).

16. Discuss the Arachidonic Acid pathway and where drugs work specifically on this pathway as it relates to inflammation and drug therapy options.

17. Discuss how a person develops Extra Pyramidal Symptoms (EPS). Discuss what can be done to alleviate EPS. Define the following:
   a. Dystonic reaction
   b. Akathesia
   c. Parkinsonism
   d. Tardive Dyskinesia

18. Discuss possible causes of seizures.

19. Discuss the physiological effects of aspirin, Tylenol, and NSAIDS within the body. MOA, side effects, and antidotes for each and patient counseling tips.

20. Discuss pain and its two major components.

21. Identify the drug of choice for mania. Identify the characteristic side effects for this drug. Discuss what important characteristics should Dr’s and nurses be concerned with when patients are taking this medication.

22. Discuss General and Local Anesthetics.

23. Identify common General and Local Anesthetic drug examples.