

**ANSWERS: Practice Quiz 1 Part B
(General Principles of Pharmacology)**

May 2014
DEH 2300

1. A patient who has had half of his small intestine removed would have difficulty with which aspect of pharmacokinetics?
 - a. Excretion
 - b. Absorption ANSWER**
 - c. Metabolism
 - d. Distribution

2. An adult patient receives 1000 mg of Med “X” at 1200 hours. The half-life is 4 hours. How much of that dose will be left in the body at 2000 hours?
 - a. 750 mg
 - b. 500 mg
 - c. 250 mg ANSWER**
 - d. 125 mg

3. Which is the generic name?
 - a. doxycycline ANSWER**
 - b. Vibramycin®
 - c. doxycycline, USP

4. When tetracycline is given with most common types of antacids the drug-drug interaction is known as:
 - a. synergistic
 - b. additive
 - c. agonistic
 - d. antagonistic ANSWER**

5. Which classification is by “pharmacologic family”?
 - a. Anti-hypertensives
 - b. Ace inhibitors ANSWER**
 - c. Anti-infectives
 - d. Schedule I drugs

6. Anti-tussives with limited amounts of opioids are classified as which schedule of drugs (Controlled Substance Act)?
 - a. I
 - b. II
 - c. III
 - d. IV**
 - e. V ANSWER**

7. Demerol® (meperidine) is classified as which schedule of drugs (Controlled Substance Act)?
 - a. I
 - b. II ANSWER**
 - c. III
 - d. IV
 - e. V

8. What is the primary difference between “side effects” and “toxic effects”?

ANSWER: Side effects are those resulting from the normal pharmacological effects of the drug. (Examples: drowsiness when taking pain meds; diarrhea when taking most antibiotics) Toxic effects are related to the dosage administered (or not excreted). (Example: Respiratory distress and/or unconsciousness resulting from very large dosages of pain meds)

9. Why would you, as a dental hygienist, be concerned about other medications that your patient may be taking when filling in a prescription for an antibiotic?

ANSWER: potential drug interactions

10. What are some common side effects which have a direct influence on dental health?

ANSWER: dry mouth, increased acidity of saliva, decreased enamel, hyperplasia of gums, etc.

11. What does “first pass” mean?

ANSWER:

Drugs administered orally are absorbed from the gastrointestinal tract, carried via the hepatic portal vein to the liver, and then undergo some metabolism by the liver before the drug has even had the opportunity to work. This removal of a drug by the liver, before the drug has become available for use, is called the first pass effect.

12. Why is a patient with chronic alcoholism at high risk for drug toxicity?

Hint: Look at the function of the liver in relation to biotransformation.

13. Define and give examples of the following “Types of Therapy”.

- a. Supportive
- b. Palliative
- c. Maintenance
- d. Supplemental
- e. Acute
- f. Prophylactic
- g. Empiric

ANSWERS:

Supportive – maintains the integrity of body function while the patient recovers. Ex: Fluids and Electrolytes

Palliative – keep patient as comfortable as possible. Ex: analgesics for terminally ill

Maintenance – does not eradicate the problem but does prevent progression. Ex: anti-hypertensives

Supplemental (replacement) – supplies the body with a substance the body needs to maintain normal function. Ex: insulin, iron

Acute – intensive drug therapy – may be needed to sustain life. Ex: vasopressor

Prophylactic (preventive) – based on experience and scientific knowledge. Ex: premed for high risk patients such as antibiotics prior to dental procedure on patient with an artificial heart valve.

Empiric – Try finding this one yourself.

14. Giving ASA (aspirin) to a patient taking Coumadin® (warfarin) would be an example of:
- indication
 - contraindication ANSWER**
 - antagonistic effect
 - idiosyncratic reaction
15. According to the website below what was the most frequently prescribed drug in 2012? What is the indication (use) for this drug? Pay attention to correct spelling of the drug.

<http://www.rxlist.com>

CHECK THE WEBSITE