Chapter 1. Basic Principles of Pharmacology

Multiple Choice

1. The use of specific drugs to prevent, treat, or diagnose disease is known as

A. toxicology

B. pharmacokinetics

C. pharmacotherapeutics

D. toxicokinetics

E. dynamic equilibrium

Ans: C

2. The study of how the body deals with a drug in terms of the way the drug is absorbed, distributed, and eliminated is known as

A. toxicology

B. pharmacodynamics

C. pharmacy

D. pharmacokinetics

E. biodynamics

Ans: D

3. Toxicology is

A. the study of the harmful effects of chemicals

B. the study of a drug's beneficial effects

C. the analysis of drug absorption, distribution, and metabolism

D. the preparation and dispensing of therapeutic medications

E. the analysis of a drug's molecular structure

Ans: A

4. The generic name of a drug

A. is also known as the “official” or “nonproprietary” name

B. is often derived from the chemical name

C. tends to be somewhat shorter than the drug's chemical name

D. all of the above are true

Ans: D

5. If there is no existing patent for a drug, or if the patent has expired, the same drug may be marketed by separate drug companies under different

A. chemical names

B. generic names

C. trade names

D. nonproprietary names

E. organic names

Ans: C

6. The generic form of a drug is considered to be as safe and effective as the original, brand-name product if the generic form \_\_\_\_\_\_\_\_\_ as the brand-name drug.

A. has the same type and amount of the active ingredient(s)

B. uses the same administration route

C. has the same pharmacokinetic profile (drug absorption, plasma levels, and so forth)

D. produces the same therapeutic effects

E. all the above are true

Ans: E

7. During drug testing and approval, the drug is usually tested in a relatively small sample (200 to 300 people) with a specific disease or pathologic condition during

A. preclinical trials

B. phase 1 clinical trials

C. phase 2 clinical trials

D. postmarketing surveillance

Ans: C

8. Drugs that can be purchased directly by the consumer without a prescription are also known as

A. nonproprietary medications

B. Schedule I controlled substances

C. Schedule II controlled substances

D. Schedule III controlled substances

E. over-the-counter drugs

Ans: E

9. The point at which there is no further increase in the response to a drug even if the dosage continues to be increased is known as the

A. ceiling effect

B. maximal efficacy

C. potency

D. all of the above

E. A and B only

Ans: E

10. When two drugs are compared, the drug that requires a lower dosage to produce the same effect as a higher dose of the second drug is said to

A. be more potent

B. be impotent

C. have a great maximal efficacy

D. have a greater therapeutic index

E. be pharmacosuperior

Ans: A

11. When evaluating drug safety, the dosage that causes 50 percent of subjects to exhibit a specific adverse effect is known as the

A. median therapeutic dose

B. median toxic dose

C. therapeutic index

D. ceiling effect

E. threshold dose

Ans: B

12. In general, the greater the value of the \_\_\_\_\_\_\_, the safer the drug is considered to be.

A. median effective dose

B. threshold dose

C. therapeutic index (TI)

D. ceiling effect

E. potency index

Ans: C

13. Regarding drug development and approval, an “orphan drug” is a drug that is

A. used exclusively in children

B. prescribed for conditions other than those approved by the FDA

C. given special funding for development because it is used in a small patient population with a relatively rare disease

D. available directly to consumers without a prescription

E. only available in countries outside the United States

Ans: C

14. Prescription use of a drug to treat conditions other than those that the drug was originally approved to treat (off label prescribing)

A. is illegal and punishable by revoking a physician’s license

B. is legal only if the Center for Disease Control provides written permission to the physician

C. is legal only if the drug is not a controlled substance

D. is legal and quite common in the United States

E. is legal only after the patent for a drug has expired

Ans: D