1. MC The term pharmacology is defined as:
   A.* The study of medicine.
   B. The use of herbs, natural extracts, vitamins, minerals, or dietary supplements to treat diseases.
   C. The branch of medicine concerned with the treatment of disease and suffering.
   D. The use of medicine to treat disease.

2. MC In addition to physicians, which of the following health care providers are able to prescribe medications? Select all that apply.
   A. Medical assistants
   B.* Advanced nurse practitioners
   C.* Physician's assistants
   D.* Dentists

3. MC The branch of medicine concerned with the treatment of disease and suffering is known as:
   A.* Therapeutics.
   B. Pharmacotherapeutics.
   C. Pharmacology.
   D. Pathophysiology.

4. MC Which of the following best describes the term pharmaceutics?
   A. The use of medicine to treat disease
   B. Herbs, natural extracts, vitamins, minerals, and dietary supplements
   C.* The science of preparing and dispensing drugs, and a very important part of pharmacotherapy
   D. Agents naturally produced in animal cells, in microorganisms, or by the body itself

5. MC Which of the following are considered medically therapeutic? Select all that apply.
   A.* Traditional drugs
   B.* Natural alternative therapies
   C. Sunscreens and antiperspirants
   D.* Biologics

6. MC Therapeutic drugs are sometimes classified on the basis of how they are produced. Insulin would fall into which category?
   A. Alternative therapies
   B.* Biologics
   C. Traditional therapeutic drug
   D. Natural therapy

7. MC Which of the following statements best describes how a traditional drug is different from a biologic agent?

A. Traditional drugs are naturally produced by the body or in animal cells, where biologic agents are chemically produced in a laboratory.

B. Biologics include herbs, natural extracts, vitamins, minerals, and dietary supplements.

C. Biologics and traditional drugs are identical chemically.

D.* Traditional drugs are chemically produced in a laboratory, where biologic agents are naturally produced by the body or in animal cells.

8. MC Drugs that demonstrate wide margins of safety and are used over long periods of time are often switched from:

A.* Prescription-only to over-the-counter (OTC) drug.

B. Traditional drug therapy classification to biologics classification.

C. One classification to a lower, less restrictive one.

D. Therapeutic to effective.

9. MC Which of the following statements describe advantages of prescription drugs versus over-the-counter (OTC) drugs? Select all that apply.

A.* The practitioner can maximize therapy by ordering the proper medication for the client's condition.

B. The cost of the drug is always less than the cost of an OTC drug.

C.* The practitioner is able to control the dose and frequency of dosing of the drug.

D. There are fewer side effects of prescription drugs than of OTC drugs.

10. MC Reasons why a client might prefer to take an OTC drug are numerous. Which of the following statements is a potential advantage of OTC drugs versus prescription drugs?

A.* A client can obtain OTC drugs more easily than prescription drugs.

B. Choosing the proper medication for a specific problem can be challenging.

C. Self-treatment is sometimes ineffective.

D. OTC drugs can react with foods, herbal products, and prescriptions, or with other OTC drugs.

11. MC The science of preparing and dispensing drugs is known as:

A. Therapeutics.

B. Pharmacology.

C. Traditional drug therapy.

D.* Pharmaceutics.

12. MC A client expresses concerns about his newly prescribed medication. The nurse explains that the safety and effectiveness of the medication have been proven, according to the statutes of which law?

A. Public Health Service Act

B. FDA Modernization Act
C. Pure Food and Drug Act
D.* Food, Drug, and Cosmetic Act

13. MC A client asks the nurse whether the claims made regarding a new medication are true or false. The nurse tells the client the following act or amendment was passed in 1912 to prevent the sale of drugs with false therapeutic claims that were intended to cheat the consumer:
A. Food, Drug, and Cosmetic Act.
B. Pure Food and Drug Act.
C. FDA Modernization Act.
D.* The Sherley Amendment.

14. MC If the FDA discovers a serious problem with a medication that has been approved, the FDA will:
A.* Require that the drug be withdrawn from the market and its use discontinued.
B. Issue a warning to practitioners to watch for side effects in clients taking the drug.
C. Require the medication to have additional clinical trials conducted.
D. Continue to monitor the medication in post-marketing studies.

15. MC A certain drug, prescribed for treatment of a particular condition, is found to be beneficial in treating a different problem. Which legislation allows drug companies to share this type of information with health care practitioners?
A. Food and Drugs Act
B. Health Products and Food Branch
C. Therapeutic Products Programme
D.* Prescription Drug User Fee Act

16. MC A client asks the nurse if all herbal supplements undergo the same testing that prescription drugs undergo. Which of the following statements would be the best response by the nurse?
A. "The Center for Food Safety and Applied Nutrition (CFSAN) regulates use of herbal supplements, which means the medication must be safe."
B. "All medications and herbal supplements undergo the same testing before being made available for purchase."
C.* "Herbal products and dietary supplements are regulated by the Dietary Supplement Health and Education Act of 1994. This act does not require the same research for herbal or dietary supplements."
D. "Herbal and dietary supplements may not be marketed without prior approval from the FDA."

17. MC Which government agency has control over which prescription or OTC drugs may be used for therapy?
A. The Center for Biologics Evaluation and Research (CBER)

B. The National Institutes of Health (NIH)
C. The Center for Food Safety and Applied Nutrition (CFSAN)
D.* The Center for Drug Evaluation and Research (CDER)

18. MC Which branch of the FDA is responsible for the use of biologics, including serums, vaccines, and products found in the bloodstream?
A. The Center for Drug Evaluation and Research (CDER)
B. The Center for Food Safety and Applied Nutrition (CFSAN)
C.* The Center for Biologics Evaluation and Research (CBER)
D. The FDA does not have a branch responsible for the use of biologics.

19. MC A client has been selected as a participant in the approval process of a particular drug. The client's dose and any effects from the medication are being monitored. The phase of drug approval in which this client is participating is the:
A. Post-marketing study.
B. Clinical phase trial.
C. Post-clinical investigation.
D.* Preclinical investigation.

20. MC Which phase of clinical research involves basic science research?
A. Submission of NDA
B. Post-marketing study
C. Clinical phase trials
D.* Preclinical investigation

21. MC Which of the following lists the stages of approval for therapeutic and biologic drugs in the correct order?
A.* Preclinical investigation, clinical investigation, NDA submission with review, and post-marketing studies
B. NDA submission with review, preclinical investigation, clinical investigation, and post-marketing studies
C. NDA submission with review, clinical investigation, preclinical investigation, and post-marketing studies
D. Preclinical investigation, NDA submission with review, clinical investigation, and post-marketing studies

22. MC The nurse is aware of the increased potential for adverse drug-drug and drug-herbal interactions, and explains this to the client in the following statement:
A.* "Drugs are being developed at a faster rate than their risk can be assessed."
B. "The restrictions placed by the FDA are stricter."
C. "Managed care has made a greater number of drugs available to consumers."
D. "People are using more herbs, so the risk for interaction is greater."

23. MC Which division of Health Canada is responsible for ensuring that health products and foods approved for sale to Canadians are safe and of high quality?

A. Natural Health Products Directorate (NHPD)
B. Biologics and Genetic Therapies Directorate (BGTD)
C.* Health Products and Food Branch (HPFB)
D. Therapeutic Products Directorate (TPD)

24. MC A client asks the nurse about the safety of medications from Canadian pharmacies. The nurse responds that drugs sold in Canada:

A.* Must be marketed with an NOC and DIN.
B. Are not safe.
C. Are not the same as those sold in the United States.
D. Are not governed by Canada.

25. MC A public health nurse is seeking information on bioterrorist agents to present education regarding security and defense in case of attack. Which of the following would be an appropriate resource?

A. U.S. National Guard
B.* U.S. Department of Homeland Security
C. U.S. Armed Forces
D. FEMA