1. Which is a parenteral route of administration?
   A) oral
   B) vaginal
   C) sublingual
   D) rectal

2. Which dosage form does not have a disintegration and dissolution step as part of its oral absorption process?
   A) tablets
   B) capsules
   C) bulk powders
   D) oral solution

3. Which is a disadvantage of an oral suspension formulation?
   A) It can be administered to patients who cannot swallow tablets.
   B) It settles over time.
   C) The drug is more stable than in solution formulations.
   D) It can mask objectionable tastes.

4. When is rectal administration the preferred route of administration?
   A) When the patient is conscious.
   B) When oral administration is available.
   C) When the drug is degraded by gastric acidity.
   D) When a systemic effect is needed.

5. Which is an “injection dependent” parenteral route of administration?
   A) inhalation
   B) intranasal
   C) epidural
   D) ophthalmic

6. Which listing of parenteral routes is the expected order of absorption rates from fastest to slowest?
   A) IV>IM>SC
   B) IV>SC>IM
   C) IM>IV>SC
   D) all routes produce the same absorption rates
7. Injectability refers to the properties of a suspension while being ______.
   A) drawn into a vial
   B) injected through a needle
   C) mixed with fatty acids to make an emulsion
   D) dissolving a lyophilized powder with a diluent

8. Drugs administered IM must undergo a step that IV administration does not require. Which step is required for IM?
   A) absorption
   B) disintegration
   C) metabolism
   D) elimination

9. When considering subcutaneous (SC) administration, which listing is the expected order of absorption rates from fastest to slowest?
   A) SC>IM>Oral
   B) IM>SC>Oral
   C) Oral>IM>SC
   D) Oral>SC>IM

10. Most ophthalmic ointments are mixtures of
    A) lanolin and eucerin.
    B) polyethylene glycols.
    C) white petrolatum and mineral oil.
    D) hypomellose (hydroxypropylmethyl cellulose) and glycerin.

11. Which inhalation administration device will help patients coordinate inspiration and actuation?
    A) MDI aerosol
    B) dry powder inhaler
    C) spacer
    D) nebulizer

12. Intrauterine devices (IUDs) provide long term
    A) blood pressure control.
    B) contraception protection.
    C) slow administration of statins.
    D) all of the above
13. Which of the following is true?
   A) Oral drugs can be given rectally
   B) Otic and ophthalmic drugs can be used interchangably
   C) many eye drops can be used in the ear
   D) many ear drops can be used in the eye

14. An example of an intradermal injections is:
   A) Insulin
   B) Depo-Provera
   C) Heparin
   D) Skin test for TB

15. Which of the following needles is the thinnest?
   A) 20 gauge 1"
   B) 26 gauge 1.5"
   C) 32 gauge 3/8"
   D) 16 gauge 1"

16. One of the benefits of IV drug administration is:
   A) Rapid onset of action
   B) Long duration of action
   C) Rapid elimination of drug
   D) Easy retrieval of drug

17. If a large quantity of drug needs to be administered, which route of administration is likely to be used?
   A) PO
   B) SQ
   C) IM
   D) IV

18. If a drug has problems with gastric irritation or gastric acid stability, what formulation of drug might be developed to overcome the problem?
   A) extended release
   B) expanded release
   C) controlled release
   D) delayed release
19. Using the technical definition of parenteral, which of the following routes of administration is NOT considered parenteral.
   A) Ophthalmic
   B) IV
   C) Buccal
   D) Inhalation

20. Which of the following is TRUE regarding the stomach?
   A) Gastric fluid is relatively alkaline
   B) Most drugs are completely absorbed in the stomach
   C) Food buffers the acid in the stomach
   D) Gastric fluid is very acidic

Bonus Questions: 1 point for each correct answer

Please give the Brand Name of the Generic Drug and the general category of use.

Quetiapine
Enalapril
Valsartan
Fluconazole
Trazadone
Answer Key

1. B
2. D
3. B
4. C
5. C
6. A
7. B
8. A
9. B
10. C
11. C
12. B
13. C
14. D
15. C
16. A
17. D
18. D
19. C
20. D