



INSYS Therapeutics Training Series
Module 2

Assessment
Key

Assessment Key

1. Bioavailability is the fraction of administered drug that enters systemic circulation.
(Page 6, paragraph 2)
2. High
(Page 5, paragraph 3)
3. A. blood flow
B. capillary permeability
C. degree of binding of drug to plasma and tissue proteins
D. physiochemical properties of the drug
(Page 7, paragraph 3)
4. Proteins / free
(Page 8, paragraph 2)
5. C
(Page 9, paragraph 1)
6. C
(page10, paragraph 1)
7. The cytochrome P-450 enzyme family metabolizes many drugs. Generally, drugs can induce or inhibit enzymatic reactions with specific cytochrome P-450 enzymes. This in turn, can affect how other drugs are metabolized, and is responsible for many drug- drug interactions. (Some drugs may boost or inhibit the ability of these enzymes to metabolize other drugs, causing drugs to be eliminated more rapidly than usual or accumulate.)
(Page 10, paragraph 3)
8. A. genetic factors
B. diet and environmental factors
C. age and gender
D. liver disease
E. alcoholism
(Page 9, paragraph 5 and page 10, paragraph 1)
9. B
(Page 11, paragraph 2)

10. Elimination half-life is the amount of time required for the plasma concentration of drug to be reduced by 50%
(Page 12, paragraph 3)
11. C
(Page 12, paragraph 6)
12. A. patients with extremes of age- elderly and neonates
B. patients with renal or hepatic impairment
C. patients at extremes of body weight
(Page 13, paragraph 2)
13. C, A, B, C, B, C, B
(Page 14, paragraph 1)
14. A. must contain the same active ingredient as original drug
B. must be identical in strength, dosage form, and route of administration
C. must have same indications for use
D. must be bioequivalent
E. must meet same batch requirements for identity, strength, purity, and quality
F. must be manufactured under the same FDA standards as original drug
(Page 14, 15)
15. Receptors
(Page 16, paragraph 1)
16. C
(Page 18, paragraph 1)
17. D,A,B,C,E
(Page 19, 20)
18. A. drugs with a narrow therapeutic index
B. patients who take multiple medications
C. patients with renal or hepatic impairment
D. patients with certain genetic characteristics
(Page 23, 24)
19. False.
(Page 25, paragraph 1)
The World Health Organization (WHO) defines an adverse drug reaction as "any response to a drug which is noxious and unintended, and which occurs at doses used in man for prophylaxis, diagnosis, or treatment."

20. Side effects are predictable pharmacologic effects that occur within therapeutic dosage ranges and are undesirable in the given therapeutic situation.
(Page 25, paragraph 3)
21. Amount of drug that produces therapeutic effects/ amount that produces toxic effects
(Page 27, paragraph 4)
22. Gastrointestinal / reactions at the injection site
(Page 29, paragraph 2)
23. A. lower and more variable bioavailability than parenteral
B. subject to first-pass metabolism
C. relatively slow onset of action
D. potential difficulty self-administering
E. not suitable for unconscious patients
F. possible compliance problems with outpatients
(Page 36, paragraph 2)
24. A. rapid onset of action
B. complete dose of drug is bioavailable
C. ability to control rate of drug delivery
D. suitable for unconscious patients or uncooperative patients
E. suitable for patients with nausea/vomiting
(Page 39, paragraph 1)
25. A. highly invasive
B. difficulty obtaining/maintaining venous access
C. need for sterile equipment/trained personnel
D. potential for complications related to administration
E. difficulty removing drug from circulation
(Page 39, paragraph 1)
26. absorbed / systemic
(Page 41, paragraph 2)
27. A. slow onset of action as drug is released
B. irritation or dermatitis at application site
C. not all drugs can be administered this way
D. visibility of patch/disc may not be acceptable to some patients
(Page 42, paragraph 1)
28. A, B, C
(Page 43)

29. B

(Page 43, paragraph 2)

30. The sublingual mucosa is relatively thinner than other mucosal sites

The sublingual mucosa is comprised of a rich supply of blood vessels close to the outer surface

(Page 42, 43)

31. D, B, A, C

(Page 46, paragraph 1)

32. See table below

Abbreviation	Meaning
Ac	Before meals
Pc	After meals
D.A.W.	Dispense as written (i.e., no substitutions)
P.O.	By mouth
P.R.	Per rectum
P.R.N.	As needed
Q.D.	Every day or once a day
B.I.D.	Twice a day
T.I.D.	Three times a day
Q.I.D.	Four times a day
Qh	Every hour (also, q8h for every 8 hours, q12h for every 12 hours)
HS	At bedtime
Ut dict	As directed

(Page 46, paragraph 2)

33. True

(Page 47)

34. A. patient is "in denial" about having the disease

B. patient is forgetful

C. patient is worried about side effects

D. patient is worried about cost of medication

(Page 48, paragraph 2)

35. C

(Page 50, paragraph 1)