







- 1. When considering drug absorption across the gastrointestinal tract, partition coefficients are useful for
 - a) Indicating whether passive diffusion of a drug across a membrane is possible
 - b) Identifying whether the drug should be administered with or after food
 - c) Predicting whether active transport of the drug is likely to occur
 - d) Identifying whether the drug will degrade in the acidic conditions of the stomach
 - 2. Which type of drugs become mostly unionized in acidic pH?
 - a) Acidic drugs
 - b) Basic drugs
 - c) Neutral drugs
 - d) None of the above
- 3.which doesn't occure if taking aspirin on empty stomach (pH = 1.5)
 - a) It becomes more ionized
 - b) It becomes more absorbable into gastric cells
 - c) It becomes trapped inside gastric cells
 - d) It causes peptic ulceration





- 4. Alkalinization of urine is useful in treating poisoning caused by:
- a) Acidic drugs
- b) Basic drugs
- c) Neutral drugs
- d) All drugs
- 5. Which route of administration has the highest absorption rate?
- a) IV
- b) Inhalation
- c) IM
- d) Oral
- 6. Which surface has the highest vascularity for drug absorption?
- a) Alveoli
- b) Skeletal muscle
- c) Subcutaneous tissue
- d) Intestine







- 7. What factor can decrease oral absorption in individuals with diarrhea and malabsorption?
- a) Vascularity
- b) Surface area
- c) State of health
- d) Shock
- 8. What is bioavailability?
- a) The percentage of unchanged drug reaching the systemic circulation
- b) The rate at which a drug is metabolized
- c) The rate at which a drug is excreted
- d) The percentage of drug absorbed through the skin
- 9. which of the following isn't the correct definition of first-pass effect ?
 - a) Metabolism of drugs in the liver before reaching systemic circulation
 - b) Metabolism of drugs in the gut wall before reaching systemic circulation
 - c) Metabolism of drugs in the lungs before reaching systemic circulation
 - d) Metabolism of drugs in the kidney before reaching systemic circulation





- 10. Which organ is primarily responsible for the hepatic first-pass effect?
- a) Liver
- b) Gut
- c) Lungs
- d) Kidney
- 11. Which factor can increase the absorption rate of paracetamol?
- a) Gastric acidity
- b) Gastric emptying
- c) Intestinal alkalinity
- d) Gut motility
- 12. How can the first-pass effect be overcome?
- a) Increase oral dose
- b) Change the route of administration
- c) Use sublingual administration
- d) All of the above





- 13. What is the role of gastric acidity in the first-pass effect?
- a) It enhances the metabolism of certain drugs
- b) It inhibits the metabolism of certain drugs
- c) It has no effect on drug metabolism
- d) It affects drug absorption
- 14. Which route of administration is associated with pulmonary metabolism?
- a) IV
- b) Inhalation
- c) IM
- d) Oral



