قائمة الاسئلة

إختبار الفصل الدراسي الاول للعام الجامعي 1446هـ الموافق 2025/2024م (Biopharmaceutics :: ( Pharmacoeconomics

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1) Biopharmaceutic Considerations in Drug Product Design
   1) - Therapeutic objective and drug (active pharmaceutical ingredient, API
   2) - Route of administration and drug dosage and dosage regimen
   3) - Type of drug product, excipients and method of manufacture
   4) + All answers are correct
2) Biopharmaceutics involves factors that influence
   1) - The design of the drug product and Stability of the drug within the drug product
   2) - The manufacture of the drug product and The release of the drug from the drug product
   3) - The rate of dissolution/ release of the drug at the absorption site and Delivery of drug to the site of action
   4) + All answers are correct
3) Is the dispersion of drugs throughout the fluids and tissues of the body
   1) - Drug absorption
   2) + Drug distribution
   3) - Drug metabolism
   4) - Drug excretion
4) Is the irreversible transformation of parent compounds into daughter metabolites
   1) - Drug absorption
   2) - Drug distribution
   3) + Drug metabolism
   4) - Drug excretion
5) Is the elimination of the drugs from the body
   1) - Drug absorption
   2) - Drug distribution
   3) - Drug metabolism
   4) + Drug excretion
6) Active transport:
   1) + Transport of a drug against concentration gradient (from regions of low drug concentrations to regions of high concentrations).
   2) - Transport of a drug concentration gradient (from regions of high drug concentrations to regions of low concentrations).
   3) - All answers are correct
   4) - All answers are incorrect
7) Transport of a drug concentration gradient (from regions of high drug concentrations to regions of low concentrations). It is not an energy consuming system. No carrier mediated
   1) - Facilitated diffusion
   2) - Pore transport
   3) - P-glycoprotein
   4) + Passive diffusion
8) Most drugs cross biologic membranes by …….
   1) - Facilitated diffusion
   2) - Active transport
   3) - P-glycoprotein
   4) + Passive diffusion
9) Bile salts are surface active agents which increase the dissolution of poorly soluble drugs for example
   1) + Griseofulvin

2) - Neomycin
3) - kanamycin
4) - All answers are incorrect

10) The metabolism of orally administered drugs by gastrointestinal and hepatic enzymes, resulting in a significant reduction of the amount of unmetabolized drug reaching the systemic circulation.
1) - Presystemic metabolism
2) - First-pass metabolism
3) + All answers are correct
4) - All answers are incorrect

11) Well absorbed complex
1) + Lipid soluble drug with Cyclodextrin
2) - Calcium with Tetracycline
3) - Mucin with Streptomycin
4) - Carboxyl methylcellulose (CMC) with Amphetamine

12) Formulation Factors Affecting Oral Absorption:you may expect the bioavailability of a drug to decrease in the order
1) + Orodispersible tablet > solution > emulsion > suspension >powder >granule > soft capsule >hard capsule > tablet > coated tablet >sustained release tablet.
2) - Solution > orodispersible tablet > emulsion > suspension >powder >granule > soft capsule >hard capsule > tablet > coated tablet >sustained release tablet.
3) - Orodispersible tablet > tablet > coated tablet >sustained release tablet > solution > emulsion > suspension >powder >granule > soft capsule >hard capsule.
4) - Ssolution > emulsion > suspension >powder >granule > soft capsule >hard capsule > tablet > coated tablet >sustained release tablet > orodispersible tablet.

13) Changes in the concentration of plasma proteins will influence the effect of a highly bound drug. A low plasma protein level may occur in:
1) - Old age
2) - Malnutrition
3) - Illness such as liver disease or chronic renal failure
4) + All answers are correct

14) Drug metabolism can be quantitatively altered by drug interactions.This alteration can be
1) - An increase by induction of enzyme activity
2) - Or a reduction by competitive inhibition
3) + All answers are correct
4) - All answers are incorrect

15) Very small molecules, such as urea, water and sugars are able to rapidly cross the cell membrane through ……:
1) - Active transport
2) - Passive diffusion
3) + Pore transport
4) - Facilitated diffusion

16) Increase Gastric emptying and motility:
1) + Hyperthyroidism
2) - Hypothyroidism
3) - Aspirin
4) - Fatty food

17) Effect of Food on drug absorption except:-
1) - Complexation of drugs with components in the diet
2) - Alteration of pH

3) - Alteration of gastric emptying and Stimulation of gastrointestinal secretions
4) + All answers are incorrect

18) Effect of Food on drug absorption except:
1) - Competition between food components and drugs for specialized absorption mechanisms
2) - Increased viscosity of gastrointestinal contents
3) + No effect of pH
4) - Food-induced changes in presystemic metabolism and Food-induced changes in blood flow

19) Limitations of the pH-partition hypothesis: Despite their high degree of ionization, weak acids are highly absorbed from the small intestine and this may be due to:
1) - The large surface area that is available for absorption in the small intestine
2) - A longer small intestine residence time
3) - A microclimate pH, that exists on the surface of intestinal mucosa and is lower than that of the luminal pH of the small intestine
4) + All answers are correct

20) Physiochemical factors affecting on drug absorption except:
1) - Lipid solubility of drugs
2) - Dissolution and pH
3) - Adsorption
4) + Food

21) Drugs that are susceptible to acidic or enzymatic hydrolysis in the GIT, suffer from reduced bioavailability:
1) + Drug stability and hydrolysis in GIT
2) - Complexation
3) - Polymorphism
4) - Dissolution and pH

22) Factor affecting rate drug distribution:
1) - Lipid Solubility
2) - pH – pKa
3) - Plasma protein binding
4) + Membrane permeability

23) Factor affecting rate drug distribution:-
1) - Lipid Solubility
2) - pH – pKa
3) - Plasma protein binding
4) + Blood perfusion

24) Factors affecting extent drug distribution:
1) - Lipid Solubility and pH – pKa
2) - Plasma protein binding and Tissue drug binding
3) + All answers are correct
4) - All answers are incorrect

25) What is the effect of protein binding on drug action
1) - Extensive plasma protein binding will decrease the amount of absorbed drug
2) - Elimination of a highly bound drug may be delayed
3) - Changes in the concentration of plasma proteins will influence the effect of a highly bound drug and may be competition between drugs, in which agents that are bound very tightly
4) + All answers are correct

26) Factors that can influence drug metabolism:
1) - Age
2) - Sex
3) - Other drugs

4) + All answers are correct

27) Factors that can influence drug metabolism
1) + All answers are correct
2) - Other drugs
3) - Physiological factors
4) - Pathological factors

28) Pathological factors that can influence drug metabolism:
1) - Liver diseases
2) - Kidney diseases
3) - Heart diseases
4) + All answers are correct

29) Mechanisms of renal excretion except:
1) - Passive glomerular filtration
2) - Active tubular secretion
3) + Liver secretion
4) - Passive tubular re-absorption

30) Factors Altering Renal drug clearance except:-
1) - Elderly and Newborn
2) - Women drug clearance (20%) than men
3) - Kidney, Heart and Renal Disease
4) + Passive diffusion

31) Factors Altering Renal drug clearance except
1) - Kidney, Heart and Renal Disease
2) - Patients taking drugs which block secretion
3) - Food
4) + Active liver secretion

32) If drug dissolution is the slow, it will be the rate determining step
1) - Increase rate of drug absorption
2) + Decrease rate of drug absorption
3) - All answers are correct
4) - All answers are incorrect

33) Drug excretion: loss of drug from the body by one or more another way
1) + Renal excretion, Fecal excretion, Excretion in bile, Direct intestinal excretion, Pulmonary excretion,Salivary excretion, Skin excretion, and Mammary excretion.
2) - Renal excretion, Fecal excretion, Pulmonary excretion,Salivary excretion, Skin excretion, and Mammary excretion.
3) - Renal excretion, Fecal excretion, Excretion in bile, Direct intestinal excretion, and Mammary excretion.
4) - All answers are incorrect

34) …..It is a measurement of the extent of a therapeutically active drug that reaches the systemic circulation and is available at the site of action:
1) - Drug distribution
2) - Drug metabolism
3) - Drug excretion
4) + Bioavailability

35) ……Compares the bioavailability (estimated as area under the curve, or AUC) of the active drug in systemic circulation following non-intravenous administration (i.e., after oral, rectal, transdermal, subcutaneous administration), with the bioavailability of the same drug following intravenous administration:

1) - Relative bioavailability
2) - Bioequivalence
3) + Absolute bioavailability
4) - Drug distribution

36) ……This measures the bioavailability (estimated as area under the curve, or AUC) of a certain drug when compared with another formulation of the same drug, usually an established standard, or through administration via a different route:
1) - Absolute bioavailability
2) + Relative bioavailability
3) - Bioequivalence
4) - Drug distribution

37) …….Means pharmaceutical equivalents or pharmaceutical alternatives whose rate and extent of absorption do not show a significant difference when administered at the same molar dose of the therapeutic moiety under similar experimental conditions:
1) - Absolute bioavailability
2) - Relative bioavailability
3) + Bioequivalence
4) - Drug distribution

38) ……Means drug products that contain the identical therapeutic moiety, or its precursor, but not necessarily in the same amount or dosage form or as the same salt or ester:
1) - Pharmaceutical Equivalent
2) + Pharmaceutical Alternatives
3) - Relative bioavailability
4) - Bioequivalence

39) ……Means drug products that contain identical amounts of the identical active drug ingredient, i.e., the salt or ester of the same therapeutic moiety, in identical dosage forms, but not necessarily containing the same inactive ingredients.
1) - Relative bioavailability
2) - Pharmaceutical Alternatives
3) - Bioequivalence
4) + Pharmaceutical Equivalent

40) Methods to Assess Bioavailability:
1) - Dissolution at administration or absorption site and free drug in systemic circulation
2) - Pharmacologic effect and clinical response
3) - Elimination
4) + All answers are correct

41) Lipophilic drugs more than hydrophilic drugs in:
1) - Decrease metabolism and excretion
2) + Increase absorption and distribution
3) - Decrease absorption and excretion
4) - No change metabolism and distribution

42) Hemodialysis or (artificial kidney) therapy is used in renal failure to remove toxic waste material normally removed by the kidneys.This technique is particularly important with drugs which:-
1) + Have good water solubility; are not tightly bound to plasma protein; are smaller molecular weight; and have a small apparent volume of distribution.
2) - Have good water solubility; are smaller molecular weight; and have a small apparent volume of distribution.
3) - Have good water solubility; are not tightly bound to plasma protein; and have a small apparent volume of distribution.

4) - Have good water solubility; and have a small apparent volume of distribution.

43) Phases of metabolism: These reactions involve CYP450 Enzymes
1) + Phase I reactions
2) - Phase II reactions
3) - All answers are correct
4) - All answers are incorrect

44) Inhibition ~ ↓ metabolic activity of enzyme
1) + ↑[drug]
2) - ↓[drug]
3) - ↕[drug]
4) - All answers are correct

45) Induction ~ ↑ metabolic activity of enzyme :
1) - ↑[drug]
2) + ↓[drug]
3) - ↕[drug]
4) - All answers are correct