



قائمة الاسئلة 06:24 2025-05-06

أنظمة توصيل دواء متقدم - صيدلة - الرابع - عام - درجة الاختبار (70)

- 1) 1-Drug delivery refers to the method of administering a pharmaceutical compound to :
  - 1) - Achieve a therapeutic effect in humans
  - 2) - Achieve a therapeutic effect in animals
  - 3) + Achieve a therapeutic effect in humans or animals
  - 4) - Involves the movement of a drug from the bloodstream to the site of administration.
- 2) 2- Some drugs may be formulated as a prodrug such as:
  - 1) - Nitrofurantion
  - 2) + Chloramphenicol Palmitate
  - 3) - Bisacodyl
  - 4) - Aspirin
- 3) 3-Drug targeting aims to:
  - 1) - Increase systemic side effects
  - 2) + Deliver drugs specifically to diseased tissues
  - 3) - Enhance first-pass metabolism
  - 4) - Reduce drug stability
- 4) 4-A polymeric coating of pH 7 is unsuitable for:
  - 1) + Gastric delivery drug
  - 2) - Intestinal delivery drug
  - 3) - Colonic delivery drug
  - 4) - Entric delivery drug
- 5) 5- To improve the DDS of drug, if a drug is not irritating to the gastric mucosal it should be administered:
  - 1) + On empty stomach
  - 2) - Immediately after fatty food
  - 3) - With food
  - 4) - With milk
- 6) 6- Certain drugs are more absorbed from the stomach region such as:
  - 1) - Weak acidic drugs which are in ionized form.
  - 2) + Weak acidic drugs which are in unionized form.
  - 3) - Weak basic drugs which are in unionized form.
  - 4) - Weak basic drugs which are in ionized form.
- 7) 7-Sulphasalazine more absorbed in the :
  - 1) - Stomach
  - 2) - Small intestine
  - 3) + Large intestine
  - 4) - Colon
- 8) 8 - Active targeting involves :
  - 1) + Using ligands to bind to specific receptors
  - 2) - Relying only on passive diffusion
  - 3) - Increasing renal excretion
  - 4) - Reducing drug absorption
- 9) 9- GIT absorption of tetracycline is reduced by the formation of :
  - 1) - Absorbable complex with calcium
  - 2) - Absorbable complex with gastrin in the stomach.
  - 3) - Non-absorbable complex with gastric Hcl.
  - 4) + Non-absorbable complex with calcium.



- 10) 10- Which drug is delivered via transdermal patches for smoking cessation?
- 1) - Fentanyl
  - 2) ☒ Nicotine
  - 3) - Scopolamine
  - 4) - Estrogen
- 11) 11- Nitrofurantoin absorption is optimal when administered :
- 1) - On an empty stomach
  - 2) - With antacids
  - 3) ☒ With a fatty meal.
  - 4) - In enteric-coated form
- 12) 12-Administration of antacid with Aspirin may leading to:
- 1) - Ionized , no ppt , and increase absorption of aspirin
  - 2) ☒ Ionized , no ppt , and decrease absorption of aspirin
  - 3) - Unionized , no ppt , and decrease absorption of aspirin
  - 4) - Unionized , no ppt , and increase absorption of aspirin
- 13) 13-Administration of antacid with enteric coated tablets may lead to:
- 1) ☒ Increase gastric disintegration
  - 2) - Decrease gastric disintegration
  - 3) - Increase intestinal disintegration
  - 4) - No effect
- 14) 14-Isoprenaline (used for bronchial asthma) best formulated as DDS and administered as:
- 1) - Plain tablets orally, because not affected by enzymes located in the intestinal mucosa
  - 2) - Enteric coating tablets orally, to prevent degradation in the stomach
  - 3) - Sugar coating tablets orally, to mask its bitter taste
  - 4) ☒ Intravenous , Inhaler, or Sublingual tab.
- 15) 15- Griseofulvin should be best administered :
- 1) - On empty stomach which contains high HCl increases solubility
  - 2) - Far away from the food to increase solubility.
  - 3) - With food, which decreases secretion of HCl .
  - 4) ☒ With fatty food, which enhances secretion of bile juice.
- 16) 16-Bile salts in small intestine form:
- 1) - Soluble; non-absorbable complexes with Neomycin.
  - 2) ☒ Insoluble; non-absorbable complexes with Neomycin.
  - 3) - Soluble; absorbable complexes with Neomycin.
  - 4) - Insoluble; absorbable complexes with Neomycin.
- 17) 17-L- dopa for Parkinson's disease, best administered:
- 1) - As Dopamine injection.
  - 2) ☒ In combination dosage form as Carbidopa/Levodopa
  - 3) - With food, which contains proteins.
  - 4) - With antacid which increases absorption of L.dopa.
- 18) 18- What is the primary advantage of transdermal DDS:
- 1) - Rapid drug absorption
  - 2) ☒ Slow and sustained drug release
  - 3) - Direct lung delivery
  - 4) - Localized skin treatment
- 19) 19-Weak acidic drug (  $pK_a$  of 3, gastric pH 2) and anti log of (1 = 10, 2 = 100, -1 = 0.1, -2 = 0.01 the ratio is:
- 1) ☒  $F_i : F_u = 0.1 : 1$
  - 2) -  $F_u : F_i = 0.1 : 1$
  - 3) -  $F_i : F_u = 1 : 100$



- 4) -  $F_i : F_u = 0.01 : 1$
- 20) 20- The absorption of drugs deferent from free acids or acids that :
- 1) - Calcium salt of Novobiocin absorbed twice that of the Sodium salt and 50 times that of the free acid
  - 2) - Sodium salt of Novobiocin absorbed less than of the calcium salt and 50 times that of the free acid
  - 3) + Sodium salt of Novobiocin absorbed twice that of the calcium salt and 50 times that of the free acid
  - 4) - The free acid of Novobiocin absorbed more than sodium salt or calcium salt
- 21) 21- Micronization of spironolactone reduced its dose from 500 mg to :
- 1) + 25 mg
  - 2) - 50 mg
  - 3) - 100 mg
  - 4) - 250 mg
- 22) 22-Theophylline can effected by cigarette smoking as the following :
- 1) + Cigarette smoking can cause increased elimination of theophylline
  - 2) - Cigarette smoking can cause decreased elimination of theophylline
  - 3) - Cigarette smoking don't show any effect on elimination of theophylline
  - 4) - Cigarette smoking can cause increase followed by decrease in elimination of theophylline
- 23) 23-The metabolic activity of enzyme are inhibited by the following drugs:
- 1) + Omeprazole, metronidazole and ciprofloxacin.
  - 2) - Phenobarbitone , Alcohol,
  - 3) - Antiepileptic agents
  - 4) - Glucocorticoide and cigarette smoking,
- 24) 24-The following are from the advantages of Intranasal Drug Delivery System except:
- 1) - Easily administered to the unconscious patients
  - 2) + Slower delivery to the blood stream and higher blood levels compared to oral medications.
  - 3) - No destruction by stomach acid and intestinal enzymes
  - 4) - No destruction by hepatic first pass metabolism
- 25) 25- Nasal delivery of insulin follows a transport mechanism involving:
- 1) + Passive diffusion mechanism
  - 2) - Active –carrier transport mechanism
  - 3) - Diffussion through aqueous pores
  - 4) - Ion-pair transport mechanism
- 26) 26- One of the following factors affecting Nasal Absorption is not true:
- 1) - Absorption of drugs decreases as the molecular weight of drug molecules increases
  - 2) + Absorption increases as concentration of drug decreases.
  - 3) - Particle size 10-50 microns adheres best to the nasal mucosa.
  - 4) - Absorption of drugs increases as the molecular weight of drug molecules decreases
- 27) 27- One of the following applications of drug targeting is not true:
- 1) - Deliver chemotherapeutic agents directly to tumor cells in cancer therapy.
  - 2) - Delivery of drugs to the site of arterial within the cardiovascular system in cardiovascular diseases.
  - 3) - Deliver drugs to the brain for treating conditions like Alzheimer's or Parkinson's disease in neurological disorders.
  - 4) + Deliver chemotherapeutic agents directly to blood stream in cancer therapy.
- 28) 28- One of the following Routes of Drug Delivery is not suitable:
- 1) - Implantable Devices: Devices implanted under the skin for long-term release.
  - 2) + Ocular: Administered drugs to the eyes for local and systemic effect.
  - 3) - Rectal: Suppositories inserted into the rectum for local and systemic effect
  - 4) - Vaginal: Medications inserted into the vaginal canal for local effect
- 29) 29- The following are from the advantages of SRT except:
- 1) - Patient compliance is improved



- 2) - Effect throughout the night, so that the patient need not be awakened until morning.
- 3) - Decrease in the number of doses administered can result in a time saving for nurses.
- 4) + The cost of prolonged action tablets is more per unit dose than conventional dosage forms.
- 30) 30-The following are examples of transdermal DDS except:
- 1) + Nicotine Patches:Used as alternative for smoking improvment .
- 2) - Hormone Patches: used in hormone replacement therapy to deliver estrogen or progesterone.
- 3) - Pain Relief Patches: Delivering analgesics like fentanyl for chronic pain management.
- 4) - Scopolamine Patches: Used to prevent motion sickness .
- 31) 31- The following are from the advantages of transdermal DDS except:
- 1) - Reduction of dosing frequency and enhancement of patient compliance.
- 2) - Provides controlled plasma levels of very potent drugs
- 3) - Provides suitability of self medication
- 4) + Provides rapid drug input.
- 32) 32- The following are from the advantages of Parenteral DDS except:
- 1) - Rapid Onset: Immediate effects for emergency situations.
- 2) - Suitability for Unconscious Patients: Can be used when oral administration is not possible.
- 3) + Requires needles and can cause pain or discomfort.
- 4) - High Bioavailability: Direct delivery into the bloodstream or target area, avoiding first-pass metabolism.
- 33) 33- The following are from the advantages of Implantable drug-delivery system except:
- 1) - Very effective with low side effects.
- 2) + Difficulty in shutting off release if necessary
- 3) - Plasma drug levels are continuously maintained in a therapeutically desirable range
- 4) - This method is relatively less expensive and less wasteful of the drug.
- 34) 34-Naproxen sodium is absorbed faster than naproxen free acid due to:
- 1) - Higher molecular weight
- 2) + Improved solubility by formation of Na salt.
- 3) - Reduced permeability
- 4) - Lower pKa
- 35) 35- Intramuscular (IM) Injection is :
- 1) - Injection into muscle tissue ( intravascular)
- 2) + Injection into muscle tissue ( extravascular)
- 3) - Injection into blood vessels ( extravascular)
- 4) - Injection into blood vessels ( intravascular)