

Question 1

Which pain assessment method should be used for a 2 year child to assess response to analgesics?

- a. Wong baker
- b. FLACC
- b. Numeric scale
- d. Five finger rule

Question 2

Which one of the following is true regarding treatment of severe acute malnutrition in Pediatrics?

- a. Dextrose is usually not given since hypoglycemia is uncommon
- b. The standard therapeutic meal in transition phase is F100
- c. Iron can be initiated safely in phase I of treatment
- d. Blood transfusion is recommended if hemoglobin is below 4g/dl

Question 3

What possible actions may leads to error when you Analysis a sucrose-based elixir using a pipette to measure aliquots of the elixir for analysis?

- a. Viscosity of elixir
- b. Incorrect use of pipettes
- c. Incorrect transfer of elixir
- d. Failure to remove interference

Question 4

What is the mechanism of action of irinotecan, a drug used to treat colon cancer?

- a. Inhibits dihydrofolate reductase
- b. Inhibits mitosis
- c. Inhibits topoisomerase
- d. Inhibits thymidylate synthases

Question 5

Which of the following is the reliable means of identifying powdered crude drugs?

- a. Biological evaluation
- b. Chemical evaluation
- b. Microscopic evaluation
- d. Organoleptic evaluation

Question 6

Which one of the following shows the least effective verbal communication of pharmacist with patient?

- a. Say "Mr. X, can you tell me how you would take this medication?"
- b. Say "Discontinue drug if associated with rapid change in blood pressure"
- c. Say "What questions do you have?"
- d. Say "What is cholesterol level in your blood?"

Question 7

According to the current evidence, what is the third step in the concept of carcinogenesis?

- a. Initiation
- b. Promotion
- c. Progression
- d. Transformation

Question 8

During reconstitution of dry powder vials, what should be the first step?

- a. Withdraw the final solution
- c. Shake to dissolve the powder
- b. Disinfect the vial stopper
- d. Inject the diluent slowly

Question 9

If the hospital drug and therapeutic committee decided that Drug A must be added to the new essential medicine list, what type of question should be asked relating to safety?

- a. Where is the data to show it's more effective than the current medicine?
- b. What is known about long term safety?
- c. Why is it twice the price of the current medicine?
- d. Which patient are we interested in?

Question 10

What is the advantage of tablets produced by wet granulation over dry granulation?

- a. Higher dissolution rates
- b. Low risk of deterioration of ingredient
- c. Lower time consumption
- d. Imparting hydrophobic properties

Question 11

Which of the following term describes the emulsion when the disperse phase of an emulsion coalesces and forms a separate layer?

- a. Caking
- b. Phase inversion
- c. Cracking
- d. Creaming

Question 12

Which combination therapy is used for those unable to tolerate an ACE inhibitor secondary to renal impairment, hyperkalemia, and angioedema in heart failure patient?

- a. Hydralazine and isosorbide dinitrate
- b. Sacubitril/valsartan
- c. Digoxin/Ivabradine
- d. Bisoprolol/ carvedilol

Question 13

If a health commodities are donated by international charitable organizations in many health programs, what type of cost the program may still be responsible for pay?

- a. Cost of profession
- b. Cost of storage
- c. Cost of taxes
- d. Cost of commodities

Question 14

Which of the following is the most selective detector in high performance liquid chromatography (HPLC)?

- a. Electrochemical detector
- b. Refractive index detector
- c. Variable wavelength UV detector
- d. Evaporative light scattering detector

Question 15

Which of the following is the characteristic of an acute pain?

- a. Result of injury or surgery and usually self-limited, subsiding when the injury heals
- b. A neuropathic pain which continues after nerve injury has been healed
- c. A pain which associated with tissues injury and stayed only for 3 months duration
- d. Pain with bradypnea, bradycardia, and decreased sympathetic nervous system

Question 16

What is the importance of reviewing medication history before dispensing any medicine?

- a. To increase consequent risks to patients
- b. To manage possible allergies and adverse reactions
- c. To increase the cost of managements
- d. To exacerbate the adverse drug reactions

Question 17

If you are given a solution of a drug which is 0.1g/100ml, what will be its %w/v?

- a. 0.1
- b. 10
- c. 100
- d. 0.01

Question 18

Dyslipidemia secondary to renal disease is manifested as:

- a. Increased HDL cholesterol
- b. Increased LDL cholesterol
- c. Excreting necessary fiber
- d. Increased Triglycerides

Question 19

The least likely activity focused by good manufacturing practice (GMP) of medicinal products?

- a. Validation of critical steps of manufacturing processes
- b. Control of number of pharmaceutical investments in a given country
- c. Presence of integrated system to recall any batch of product
- d. Approval of samples of starting and packaging materials

Question 20

What is the end point in pharmaceutical analysis?

- a. The point where an external material added to the titration
- b. The substance whose concentration is not known
- c. The process whereby the concentration of a reagent is determined
- d. The point at which the reaction between titrant and titrand is completed

Question 21

Which of the following symptoms defines severe pneumonia in a 2-year-old pediatric patient according to the WHO IMCI guidelines?

- a. Oxygen saturation <95%
- b. Central cyanosis
- c. Chest indrawing
- d. ≥ 40 breaths/minute

Question 22

Which mechanism should be primarily utilized to procure essential pharmaceuticals for a public health facility in Ethiopia under standard legislative protocols?

- a. Through the Ethiopian Pharmaceutical Supply Service (EPSS) or from private suppliers using an official stock-out certificate
- b. By using open international tenders to directly recruit manufacturing entities
- c. Direct open negotiation sessions with local GMP-certified providers
- d. Utilizing restrictive closed tenders from preferred historical distributors

Question 23

A 20-day-old neonate with confirmed bacterial meningitis is being treated. Which of the following represents the most critical clinical concern when considering the use of Ceftriaxone in this specific patient age group?

- a. Displacement of bilirubin from albumin binding sites, exacerbating the risk of hyperbilirubinemic kernicterus
- b. Lack of coverage against *Listeria monocytogenes* when used as monotherapy
- c. High risk of systemic biliary sludge formation (pseudocholelithiasis)
- d. Elevated clearance rates requiring massive unphysiological dosing schedules

Question 24

Which pharmaceutical forecasting technique should be used in a hospital setup that features highly stable drug consumption rates and reported no stock outs in the previous fiscal year?

- a. Consumption method
- b. Service level projection
- c. Adjusted consumption method
- d. Morbidity method

Questions 25_ 48 Missing Questions

Question 49

Why must a practicing pharmacist thoroughly understand core ethical principles alongside the formal statutory laws governing pharmacy practice?

- a. Ethical principles provide a structured decision-making framework when clear statutory laws do not explicitly cover a specific clinical scenario
- b. Ethical compliance overrides structural laws during complex cross-border trade transactions
- c. Pharmacy laws and ethical codes are completely interchangeable and identical
- d. Statutes automatically adapt to accommodate every individual ethical concern raised

Question 50

Loperamide is an antidiarrheal drug taken orally that normally does not cross the blood-brain barrier. Which concurrent drug causes a significant drug-drug interaction by inhibiting P-glycoprotein efflux transporters, resulting in central opioid toxicities?

- a. Metformin
- b. Enalapril
- c. Omeprazole
- d. Quinidine

Question 51

What is the standard, physiological drug of choice for hormone replacement therapy in an autoimmune-induced Addison's disease patient?

- a. Oral spironolactone at 100 mg per day
- b. Oral fludrocortisone at 100 mcg per day
- c. Oral hydrocortisone split-dosed (e.g., 15-20 mg/day mimicking diurnal rhythm)
- d. Topical ketoconazole at 200 mg per day

Question 52

A 42-year-old male patient with chronic kidney disease (CKD) stage 4 is evaluated for anemia. His hemoglobin level is 8.5 g/dL. The physician decides to initiate an erythropoiesis-stimulating agent (ESA). According to the KDIGO guidelines, what is the target hemoglobin range for this patient to balance the benefits of reducing blood transfusions against the risks of cardiovascular events?

- a. 9.0 - 10.0 g/dL
- b. 10.0-11.5 g/dL
- c. 11.5-13.0 g/dL
- d. Greater than 13.0 g/dL

Question 53

Which of the following is the primary mechanism of action of thiazide diuretics in the management of hypertension?

- a. Inhibition of the Na⁺/K⁺/2Cl⁻ cotransporter in the thick ascending limb of the loop of Henle
- b. Inhibition of the Na⁺/Cl⁻ cotransporter in the distal convoluted tubule
- c. Antagonism of aldosterone receptors in the collecting duct
- d. Blockade of epithelial sodium channels (ENaC) in the late distal tubule

Question 54

A 65-year-old female presents with complaints of severe pain, swelling, and morning stiffness in both hands lasting for about 45 minutes. Laboratory tests confirm positive rheumatoid factor (RF) and anti-cyclic citrullinated peptide (anti-CCP) antibodies.

Which of the following should be initiated as the first-line disease-modifying antirheumatic drug (DMARD) of choice?

- a. Hydroxychloroquine
- b. Sulfasalazine
- c. Methotrexate
- d. Adalimumab

Question 55

Which of the following pharmacokinetic parameters remains completely constant and independent of the plasma drug concentration in zero-order elimination kinetics?

- a. Elimination rate constant (K)
- b. Elimination half-life ($t_{1/2}$)
- c. Clearance (CI)
- d. Elimination rate (R)

Question 56

A patient with chronic obstructive pulmonary disease (COPD) is prescribed an inhaled long-acting muscarinic antagonist (LAMA) for maintenance bronchodilator therapy. Which of the following drugs belongs to this specific class?

- a. Ipratropium bromide
- b. Tiotropium bromide
- c. Salmeterol xinafoate
- d. Formoterol fumarate

Question 57

What is the primary purpose of incorporating a plasticizer into a polymer film coating solution during industrial tablet production?

- a. To increase the film flexibility and reduce film brittleness or cracking
- b. To enhance the water permeability of the enteric coat
- c. To act as an opacifier to protect the active ingredient from light
- d. To increase the viscosity of the coating solution to ensure fast drying

Question 58

A 35-year-old pregnant woman in her second trimester presents with a confirmed uncomplicated lower urinary tract infection (UTI). Urine culture identifies *E. coli* highly sensitive to all tested agents. Which of the following options represents the safest and the most appropriate antimicrobial choice?

- a. Ciprofloxacin
- b. Cephalexin
- c. Doxycycline
- d. Cotrimoxazole

Question 59

Which of the following pharmacodynamic terms describes the phenomenon where the administration of an antagonist shifts the agonist dose-response curve to the right without reducing the maximal response ($SE_{\{max\}S}$)?

- a. Competitive antagonism
- b. Non-competitive antagonism
- c. Uncompetitive antagonism
- d. Irreversible functional antagonism

Question 60

A patient diagnosed with acute proximal deep vein thrombosis (DVT) is to be initiated on oral anticoagulation therapy. Which of the following drugs requires overlapping "bridging" therapy with a rapid parenteral anticoagulant (such as low-molecular-weight heparin) for at least 5 days?

- a. Rivaroxaban
- b. Apixaban
- c. Warfarin
- d. Dabigatran etexilate

Question 61

Which of the following instrumental analytical techniques is most appropriate and widely utilized for the reliable separation, identification, and quantitative analysis of volatile compounds?

- a. High-Performance Liquid Chromatography (HPLC)
- b. Gas Chromatography (GC)
- c. Thin-Layer Chromatography (TLC)
- d. Ultraviolet-Visible Spectrophotometry (UV-Vis)

62 _ 71 Missing Questions

Question 72

A patient is poisoned with Malathion. Which of the following drug used to treat by reversing inactivated AChEase?

- a. Benztropine
- b. Pralidoxime
- c. Neostigmine
- d. Atropine

Question 73

What should be done first for a patient who is admitted with angina pectoris chest pain?

- a. Initiate morphine at a dose of 20mg IV QID
- b. Give propranolol if it is Prinzmetal angina
- c. Administer sublingual nitroglycerin
- d. Give high dose atenolol

Question 74

What is the purpose of silica gel in thin layer chromatography (TLC)?

- a. Mobile phase
- b. Eluent
- c. Adsorbent
- d. Analyte

Question 75

Why should furosemide be given intravenously rather than orally for a patient with massive ascites?

- a. Its bioavailability is decreased by its binding with ascitic proteins
- b. It is difficult to swallow furosemide in a patient with ascites
- c. Its volume of distribution will be highly increased by ascites
- d. It is associated with greater risk of vomiting in a patient with ascites

Question 76

Which of the following refers to the mechanical process of reducing the particle size of solids?

- a. Milling
- b. Blending
- c. Leaching
- d. Granulation

Question 77

A woman who is a fast acetylator is taking isoniazid for the treatment of tuberculosis. While the pharmacist is evaluating the patient, what will be the most likely outcome of being a fast acetylator?

- a. Increased risk of treatment failure
- b. Increased risk of allergic reaction
- c. Increased distribution of isoniazid
- d. Increased risk of peripheral neuropath

Question 78

Assume a drug follows the kinetics of a one-compartment model and has an elimination half-life of 3 hours with an apparent volume of distribution of 100 mL/kg. What is the total body clearance for a drug in a 70-kg male patient?

- a. 1217 mL/h
- b. 300 mL/h
- c. 1617 mL/h
- d. 210 mL/h

Question 79

A patient taking cyclophosphamide for breast cancer has developed hemorrhagic cystitis. What is the antidote for this toxicity?

- a. Amifostine
- b. Mesna
- c. Naloxone
- d. N-acetyl cysteine

Question 80

A 55 year old patient who is taking diazepam for his anxiety disorder fears developing dependence. What is the appropriate recommendation for this patient to reduce his fear?

- a. Change diazepam with sertraline for long term use
- b. Increase the dose of diazepam for the rapid control of anxiety

- c. Stop taking the drug to void the dependence syndrome
- d. Continue taking diazepam despite the dependence risk

Question 81

Which of the following is INCORRECT about infrared spectrophotometry?

- a. It is rarely used as a quantitative technique because of relative difficulty in sample preparation
- b. It provides a complex fingerprint which is unique to the compound being examined
- c. Its robustness and thus minimal care has to be taken in sample processing
- d. It detects gross impurities in samples and sample preparation requires advanced skill.

Question 82

A patient with an acute ST-segment elevated myocardial infarction is presented with a heartbeat of 40bpm and blood pressure of 80/50mmHg. Which of the following Should drugs be withdrawn after such evaluation?

- a. Aspirin
- b. Dipyridamole
- c. Metoprolol
- d. Heparin

Question 83

What is the therapeutic index?

- a. Plasma drug concentration to optimize the outcome of therapy
- b. Specific drug dose, causing minimum toxicity
- c. Comparison of two drugs, used for same indication
- d. Ratio of toxic or lethal dose and effective dose

Question 84

Which class of analgesics would you recommend in the postoperative period if the patient pain rated as moderate?

- a. Corticosteroids
- b. Opioids
- c. Non-steroidal anti-inflammatory drugs
- d. Local anesthetics

Question 85

Insulin is the primary treatment to lower blood glucose levels for patients with T1DM. If insulin and the hormone amylin administered at same time, what is the primary objective of adding amylin?

- a. To increase the absorption of insulin
- b. To lower postprandial blood glucose elevations
- c. To increase the activity of insulin
- d. To prevent fluctuations in blood glucose levels

Question 86

Which of the following diseases is easily managed at an ambulatory ward?

- a. Kidney diseases
- b. Heart failure
- c. Cancer
- d. Diabetes mellitus

Question 87

A patient with dyspepsia comes to a community pharmacy to buy medications for his condition. His history reveals that he has no medical history and no other symptoms. What is the most appropriate action the pharmacist should provide to this patient?

- a. Indicating to the next health care institution
- b. Dispensing antacids that should be taken PRN
- c. Selling the available products to run the business
- d. Dispensing prescription strength acid secretion suppressants

Question 88

Mr. YZ has major depressive disorder and he is taking sertraline. Which counseling technique a pharmacist should do?

- a. Use a teach back method to check patients understanding
- b. Communicate rapidly to save the patient's time
- c. Tell the patient improvement can occur within one day of taking the drug
- d. Counsel on prescription drug only

Question 89

What type of drug interaction happened when antidepressants are commonly prescribed with other psychotropic agents?

- a. Idiosyncratic
- b. Pharmacokinetic
- c. Pharmacodynamics
- d. Contraindicated

Question 90

Which of the following allows noble individualized dosage form preparation?

- a. 3D printing of dosage forms
- b. Batch granulation
- c. Continuous mixing of powers
- d. Conventional table compression

Question 91

A 67-year-old woman is scheduled for elective total knee arthroplasty. What local anesthetic agents would be most appropriate if surgical anesthesia was to be administered using a spinal?

- a. Bupivacaine
- b. Lidocaine
- c. Adrenaline
- d. Cocaine

Question 92

If a patient with ascites has serum-ascites albumin gradient (SAAG) of greater than or equal to 1.1 g/dL (11 g/L), what is the most probable etiology?

- a. Malnutrition
- b. Heart failure
- c. Kidney failure
- d. Portal hypertension

Question 93

One of the following is the characteristics of absorption type ointment bases?

- a. Poor drug release
- b. Washable
- c. Easily spreadable
- d. Hydrophobic

Question 94

A pregnant woman on her 3rd trimester of pregnancy is taking indomethacin, methyl dopa, doxalamine and metformin. Which drug may be associated with premature closure of ductus arteriosus?

- a. Methyl dopa
- b. Doxalamine
- c. Metformin
- d. Indomethacin

Question 95

Why ACEIS (e.g. enalapril) is the preferred drug in treating hypertension a diabetic patient?

- a. Is associated with a decreased serum creatinine
- b. It protects the kidneys
- c. It can be used for patients developed angioedema
- d. It reverses pathogenesis of diabetes

Question 96

While you are appraising different type of dosage forms, which of the following gives an improved bioavailability from the oral route?

- a. A suspension that disintegrates rapidly in GI
- b. A solution that precipitates in GI fluid
- c. A sugar coated tablet
- d. A soft gelatin capsule

Question 97

Diclofenac, a NSAID was found to have 10.4 capacity factors in a particular mobile on a reverse-phase column. Given that the column had a t_0 of 2 min, what is the retention time of diclofenac?

- a. 9.6 min
- b. 22.8 min
- c. 2.8 min
- d. 31.0 min

Question 98

An asthmatic patient has developed repeated attacks while he was on PRN Albuterol. What is the most appropriate drug that should be added to the patient's drug regimen?

- a. Oral prednisolone
- b. Inhalational beclomethasone
- c. Inhalational ipratropium
- d. Inhalational salmeterol

Question 99

Which the following antifungal drug is preferred for treating cryptococcal meningitis due to its good penetration through the blood brain barrier?

- a. Amphotericin B
- b. Fluconazole
- c. Griseofulvin
- d. Clotrimazole

Question 100

If you are asked to develop a method to handle light sensitive drug, which of the Is the following the appropriate way?

- a. Decreasing working temperature
- b. Using amber colored glassware
- c. Preparing the drug by exposing it to UV light
- d. Adding strong acids to stabilize it