الاسئلة الوزارية لمادة الفارماكولوجي لكليات الصيدلة لسنة 2022

بسم الله الرحمن الرحيم

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اضغط على اسم الجابتر للانتقال له

وبعد الانتقال له اضغط على اسم الجابتر كذلك للعودة للفهرس

تم التعاون على تجميع الاسئلة وترتيب الملف والتأكد من حلول الاسئلة من قبل الطلبة

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Pharmacokinetics

23- Which of the following Phase II metabolic reactions makes phase I metabolites readily eliminated in urine?

A- Oxidation
B- Reduction
C- Glucuronidation
D- Hydrolysis
E- Alcohol dehydrogenation

24- Half-life may increase when the drug has

A- Large volume of distribution
B- Wide therapeutic index
C- Rapid clearance
D- low plasma – protein binding
E- Increased bioavailability

36- Regarding Bioavailability, select the correct answer

A- Is the fraction of administered drug that reaches unchanged to the systemic circulation
B- Drugs that are extremely lipophilic have good bioavailability.
C- Nitroglycerin has low bioavailability.
D- Hydrophobic drugs have high bioavailability.
E- All of above

37- Regarding DRUG DISTRIBUTION, All the following are true except

A- adipose tissue, skin, and viscera have high rates of blood flow.
B- Binding of drugs to plasma proteins and tissues increase the rates of blood flow
C- heparin distribute into about 20% of the body weight, or about 14L in 70 Kg individual
D- increases Vd can lead to an increase in the half life
E- None of above

38- Regarding Distribution into the water compartments in the body Hydrophilic drugs with low molecular weight form good concentration in:

A- Plasma
B- interstitial fluid
C- the intracellular fluid
D- in the CNS
E- All of the above

50- Regarding differences between IM and SC routes, both intramuscular and subcutaneous routes characterized by all of the following Except :

A- Their absorption pattern depends on drug diluents, indicated for soluble and poorly soluble preparations
B- They are suitable for drugs with oily vehicles, irritant substances and slow-release preparations
C- Not provide accurate measurement for drug level in plasma
D- Less risky than intravenous route
E- Not used for drugs with large volume.

51- Regarding the mechanisms of drug absorption

A- Active transport is energy-dependent and is driven by concentration gradient across a membrane
B- Exocytosis involves engulfment of a drug molecule by the cell membrane
C- The effective concentration of the permeable form of each drug at the absorption site is determined by its high concentrations of the charged form
D- Both Facilitated diffusion and passive lipid diffusion are energy independent

E- Passive aqueous diffusion limited to small hydrophobic molecules that cross membranes along their concentration gradient

52- The following can decrease the volume of distribution for drug

A- Lipophilicity
B- Plasma Protein binding
C- Low molecular weight
D- Tissue protein binding
E- All the above

53- The CYP450-dependent enzymes are an important target for pharmacokinetic drug interactions. Which of the following is CYP450 inducer

A- Omeprazole
B- Cimetidine
C- Ketoconazole
D- Theophylline
E- phenobarbitone

54- kidney represent the most important route for elimination of the drug. The following effect the renal elimination

A- Extent of Plasma protein binding of drug
B- Glomerular filtration rate
C- Active tubular reabsorption
D- Tubular ionization of drug
E- All the above

Pharmacodynamic

34- Which of the following cytochrome P450 isoenzymes is involved in the metabolism of largest number of drugs in human beings and has been implicated in some dangerous drug interactions?

A- CYP 3A4 B- CYP 206 C- CYP 201
D- CYP 1A2 E- CYP 2C 19

39- Regarding secondary messenger, the increase of second messengers (cAMP, cGMP, Ca^{+2}, etc.) concentration leads to

A- Inhibition of intracellular protein kinases and protein phosphorylation
B- Inhibition of protein phosphorylation only
C- Protein kinases activation and protein phosphorylation
D- Blocking of interaction between a receptor and an effector
E- Antagonism with endogenous ligands

40- Regarding the DOSE-RESPONSE RELATIONSHIPS, full Agonists have

A- Affinity to receptors only
B- Affinity and maximal intrinsic activity
C- Affinity but no intrinsic activity
D- Affinity and submaximal intrinsic activity
E- Affinity without potency

46- Therapeutic index, all true except:

A- larger value indicates the drug is toxic.
B- Therapeutic index TD50/ED50
C- as toxic dose of drug is large, the drug has large therapeutic index
D- Penicillin is an example of a drug with a large therapeutic index.
E- warfarin is an example of a drug with a low therapeutic index.

55- Cells have many different types of receptors. All the following agent act by intracellular receptor Except

A- thyroid hormone
B- Vitamin D
C- insulin
D- Cortisol
E- Steroids

56- Graded dose-response relationship is used to determine the following

A- potency only B- Efficacy Only
C- Safety only D- potency and Efficacy
E- potency, Efficacy, Safety

63- Regarding allosteric antagonists, choose the most appropriate answer:

A- reduce agonist potency
B- reduce agonist efficacy
C- causes downward shift of the EC50 with no change in the Emax value of an agonist
D- Reduce agonist efficacy.
E- Decrease EC50

Autonomic nervous systems

57- Which of the following features describes the parasympathetic nervous system.

A- Diffuse response
B- Extensive preganglionic fiber branching
C- Ganglia close to the spinal cord
D- Short postganglionic fibers
E- Wide distribution

58- Activation Of sympathetic nervous system result in all the following effects Except

A- shifting of blood flow from cutaneous blood vessels to the skeletal muscle
B- Relaxation of bronchial smooth muscles
C- Decrease of intestinal tone and peristaltic activity
D- Preserve energy store and enhance gluconeogenesis and storage of glycogen
E- increase the visual field by inducing active mydriasis

Cholinergic Agonists:

13- All the following are major indications to the use of muscarinic agonists, Except?

A- Postoperative bladder retention
B- Xerostomia
C- Myasthenia gravis
D- Asthma
E- Glaucoma

14- Nerve agents can inhibit cholinesterase enzymes. Which of the following symptoms would you expect to see in a patient exposed to nerve gas?

A- Urinary retention
B- increased blood pressure
C- increased intestinal motility and diarrhea
D- mydriasis
E- Tachycardia

28- All of the following statements are correct except:

A- Bethanechol lacks muscarinic actions but does have strong nicotinic activity
B- Carbachol are synthetic ester of choline
C- Carbachol has longer duration of action than acetylcholine
D- Bethanechol is used postoperatively to stimulate the atonic bladder
E- Carbachol has both muscarinic as well as nicotinic actions

29- Regarding cholinergic system, which of the following is not direct-acting cholinergic agent :

A- Physostigmine
B- Acetylcholine
C- Bethanechol
D- Carbachol
E- Pilocarpine

30- Which of the following drugs or classes of drugs will be useful in treating the symptoms of myasthenia gravis?

A- Sympathomimetic agents
B- Anticholinesterase agents
C- Muscarinic antagonists
D- Muscarinic agonists
E- Nicotinic antagonists

44- In Alzheimer's disease, there is a deficiency of cholinergic neuronal function in the brain. Theoretically, which of the following strategies will be useful in treating the symptoms of Alzheimer's disease?

A- Inhibiting cholinergic receptors in the brain.
B- Inhibiting the release of acetylcholine in the brain.
C- Increase the release of acetylcholine in the brain
D- Inhibiting the acetylcholinesterase enzyme in the brain
E- Activating the acetylcholinesterase enzyme in the brain.

59- There is a different type of neurons in body. All the following is cholinergic neuron except :

A- Sympathetic preganglionic neuron
B- Sympathetic postganglionic neuron
C- Parasympathetic postganglionic neuron
D- Parasympathetic preganglionic neuron
E- Somatic neuron

60- Muscarinic receptors belong to the class of G-protein-coupled receptors. All the following act as second messenger for these receptors Except :

A- cAMP
B- Inositol-1,4,5-trisphosphate
C- Diacylglycerol
D- Sodium
E- Calcium

61- Acetylcholine is a quaternary ammonium direct acting cholinergic agent. It not used clinically because :

A- Its low volume of distribution
B- It is highly toxic
C- Short duration of action
D- Poorly absorbed
E- It is costly

62- Different Cholinomimetic drugs can be used in the treatment of Alzheimer disease. Which of the following is not be used now :

A- Galantamine B- Donepezil
C- Rivastigmine D- Tacrine
E- All the above

65- Cholinergic effect can be achieved by inhibition of acetylcholinesterase, Which of the following have central effect :

A- Neostigmine
B- Edrophonium
C- Pyridostigmine
D- Physostigmine
E- All the above

66- Organophosphate compounds are extremely toxic Concerning these agents

A- It bound reversibility with AChE
B- Can be treated with neostigmine
C- Galantamine is example for these agents
D- Pralidoxime is used as antidote
E- Have therapeutic use.

67- 40-year-old male present to emergency with pinpoint pupil, salivation, lacrimation, tremors, and red tears. Plasma cholinesterase level was 40% of normal the patient suffering from :

A- Atropine overdose
B- Organophosphorus poisoning
C- Pilocarpine overdose
D- Nicotine poisoning
E- Opioid toxicity

Cholinergic antagonists:

21- All of the following are actions of muscarinic antagonists, Except?

A- Decreases gastric secretion
B- Increase heart rate
C- Decreases tracheobronchial secretions
D- Pupillary constriction and cycloplegia
E- Relaxation of the GI tract

31- All of the following statements are correct except one

A- Atropine might induce reduction of cardiac rate at very high dose
B- Atropine toxicity can be overcome by physostigmine
C- Atropine usage provokes latent glaucoma especially in elderly
D- Atropine usage provokes urine retention
E- Atropine can inverse the central and muscarinic action of isoflurophate

64- 3-year-old girl was found ingested high dose of atropine. Which of the following drugs might be used as antidote to Atropine

A- Dopamine
B- Epinephrine
C- Scopolamine
D- Acetylcholine
E- None of the above

68- Asthma can be treated by different drug classes, which of the following is used as an inhalation drug in asthma

A- Atropine
B- Scopolamine
C- ipratropium
D- tropicamide
E- cyclopentolate

69- Regarding clinical uses of antimuscarinic drugs. Antimuscarinic drugs are indicated in all the following conditions Except

A- Parkinson's disease
B- Retinal examination
C- Intestinal spasm
D- Motion Sickness
E- Atrial fibrillation

70- There are different types of anticholinergic drugs. The following are mainly nonselective muscarinic antagonists EXCEPT

A- Atropine
B- Scopolamine
C- Oxybutynin
D- trospium
E- solifenacin

71- Neuromuscular blockers are used in the intensive care unit as adjuvant therapy to facilitate intubation & mechanical ventilation in critically ill patients. Which of the following cannot be used for patient with renal failure?

A- Cisatracurium
B- rocuronium
C- Pancuronium
D- vecuronium
E- Mivacurium

72- in the operating room, patient is given IV succinylcholine. This agent will initially produce which of the following responses?

A- Apnea
B- Ganglionic blockade
C- Vascular smooth muscle relaxation
D- Urinary bladder paralysis
E- Muscle fasciculations

73- Regarding the kinetics of NMBs. Which neuromuscular blocker is the best choice for patient with liver and renal dysfunction?

A- Vecuronium
B- Rocuronium
C- d.tubocurarine
D- Cisatracurium
E- Pancuronium

33- All of the following statements are correct except:

A- Calcium-channel blockers decrease the neuromuscular block of succinylcholine
B- Nicotine affects both sympathetic and parasympathetic ganglia
C- Mecamylamine produces a competitive nicotinic blockade of the ganglia
D- Tubocurarine has histamine-releasing action
E- Homatropine reduces eye pressure following an eye surgery

Adrenergic Agonists:

22- Selective α2 agonist is:

A- Clonidine
B- Prazosin
C- Adrenaline
D- Propranolol
E- glycopyrrolate

32- β2 stimulants frequently can cause :

A- Vasodilation in the skin
B- Skeletal muscle tremor
C- Stimulation of renin release
D- Increased cGMP in mast cells
E- Hypoglycemia

74- Concerning Catecholamine synthesis. Which of the following is the catecholamine precursor :

A- Tyramine
B- Glycine
C- Tyrosine
D- Alanine
E- Cysteine

76- There are different type of adrenergic agonist. Which of the following agents is a nonselective β receptor agonist?

A- Clonidine
B- isoproterenol
C- Propranolol
D- Dopamine
E- Dobutamine

77- If pharmacological dose of epinephrine was administered, the following effect on heart was observed an increase in the heart rate, contractility and electrical impulse conduction rates. Which adrenergic receptor is responsible for these direct cardiac effects?

A- α1 receptor
B- α2 receptor
C- β1 receptor
D- β2 receptor
E- β3 receptor

79- Which of the following drugs is not a direct-acting adrenergic agonists:

A- Amphetamines
B- Norepinephrine
C- Phenylephrine
D- Fenoldopam
E- Isoproterenol

80- Indirect-acting adrenergic agonists act by different mechanism. All the following is true except :

A- Displacement of stored catecholamines from the adrenergic nerve ending
B- Inhibition of reuptake of catecholamines already released
C- Cause the release of endogenous catecholamines from adrenergic neurons
D- Interaction with adrenoreceptors
E- Inhibit the degradation of catecholamines

81- Amphetamines is an indirect sympathomimetic drug. Which one of the following is a central effect Amphetamines?

A- Tachycardia
B- Myosis
C- Bronchodilation.
D- Hypertension
E- Anorexia

82- Phenylephrine drops were prescribed to a 29-year patient to treat nasal stuffiness, cough, and sinus pain. The patient must be aware of which of the following potential adverse effects?

A- Constipation
B- Diarrhea
C- Epistaxis
D- Hypertension
E- Tinnitus

Adrenergic Antagonists:

41- The "first-dose" effect or orthostatic hypotensive response is a common adverse effect of all of the following drugs, Except:

A- Tamsulosin
B- Prazosin
C- Terazosin
D- Labetalol
E- None of the options

42- β blockers are indicated for all of the following conditions, Except

A- hypothyroidism
B- Alcohol withdrawal
C- Portal hypertension
D- Performance anxiety
E- all of above

43- A β blocker was prescribed for hypertension in a female asthma patient, after about a week of treatment, the asthma attacks got worse, and the patient was asked to stop taking the β -blockers, Which of the following β blockers would you suggest as an alternative in this patient that is less likely to worse her asthma?

A- Propranolol
B- Metoprolol

C- Labetalol
D- Carvedilol
E- Prazosin

75- A therapeutic dose of a drug that selectively and competitively blocks the postsynaptic-adrenergic (α1) receptors. It has no effects on presynaptic α-adrenergic receptors (α2) or β-adrenergic receptors found anywhere in the periphery, whether as an agonist or antagonist. Which of the following is the most likely drug?

A- Ephedrine
B- Labetalol
C- Phentolamine
D- Phenylephrine
E- Prazosin

78- In the lab of pharmacology, an unknown drug was administered to dog to prevent tachycardia evoked by isoproterenol. Which of the following agents is most likely the administered drug?

A- Atropine
B- Hexamethonium
C- Phentolamine
D- Physostigmine
E- Propranolol

83- Concerning the α-receptor blocker, the following have no significant effect on blood pressure

A- Prazosin
B- Doxazosin
C- Tamsulosin
D- Terazosin
E- None of the above

84- Regarding the effects of α-blockers. Blocking of α-receptor result in all of the following effects Except

A- Fall in peripheral resistance
B- Bronchospasm
C- Postural hypotension with reflex tachycardia
D- Nasal congestion
E- Epinephrine reversal convert a pressor response to a depressor response

85- Propranolol is the prototype B-adrenergic antagonist. Propranolol can reverse the following effect of adrenaline Except.

A- Bronchodilation
B- Lipolysis
C- Mydriasis
D- Muscle tremor
E- Cardiotonic effect

86- Acebutolol is well absorbed from the GI tract, but undergoes substantial first-pass metabolization, leading to a bioavailability of only 35% to 50%. Choose the most appropriate answer

A- Acebutolol is used for stable angina or arrhythmias due to their partial agonist effect.
B- Acebutolol increases the disturbances of lipid and carbohydrate metabolism that are seen with other B-blockers
C- Acebutolol is effective in hypertensive patients with moderate tachycardia
D- Acebutolol is a β2-selective antagonist with partial agonist activity.
E- Acebutolol stimulates ß1 & ß2 receptors weakly.

87- Regarding therapeutic use of β blockers, which of the following β receptor antagonists is preferable in hypertensive patient with diabetes or peripheral vascular diseases

A- Propranolol
B- Timolol
C- Sotalol
D- Metoprolol
E- Pindolol

88- β blockers have different therapeutic use. It used in the treatment of hypertension by effecting on

A- Heart
B- Blood vessels
C- Renin angiotensin system
D- All the above
E- None of the above

Principles of Antimicrobial Therapy

17- Which of the following is the primary method of B-lactam resistance with Streptococcus pneumoniae?

A- Modification of target site.
B- Decreased drug levels due to changes in permeability
C- Decreased drug levels due to an efflux pump.
D- Enzymatic inactivation
E- None of the above

27- In which one of the following clinical situations is the prophylactic use of antibiotics not necessary? خارجي

A- Prevention of meningitis among individuals in close contact with infected patients
B- Patient with a hip prosthesis who is having a tooth removed
C- Pre-surgical treatment for implantation of a hip prosthesis.
D- Patient who complains of frequent respiratory illness
E- Pre-surgical treatment in gastrointestinal procedures.

Cell Wall Inhibitors:

1- Gram negative organisms are largely insensitive to benzyl penicillin because : خارجي

A- They produce large quantities of penicillinase
B- They do not utilize D-alanine whose incorporation in the cell wall is inhibited by benzyl penicillin
C- Benzyl penicillin is not able to penetrate deeper into the lipoprotein-peptidoglycan multilayer cell wall of gram -ve bacteria
D- both (a) and (b)
E- All above

2- The penicillin G preparation with the longest duration of action is : خارجي

A- benzathine penicillin
B- Sodium penicillin
C- Potassium penicillin
D- Procaine penicillin
E- Piperacillin

19- Which of the following antibiotics is considered safe to use in neonates.

A- Chloramphenicol
B- Sulfamethoxazole/trimethoprim.
C- Tetracycline
D- Penicillin G
E- Ciprofloxacin.

25- The most appropriate treatment of gonorrhea is:

A- A single intramuscular dose of ceftriaxone
B- Amoxicillin orally for 7 days
C- Procaine penicillin G intramuscularly as a single dose plus oral probenecid
D- Meropenem orally for 7 days
E- Vancomycin intramuscularly as a single dose

45- Which of the following cephalosporins has activity against gram-negative anaerobic pathogens like Bacteroides fragilis?

A- Cefoxitin
B- Cefepime
C- Ceftriaxone
D- Cefazolin
E- Ceftazidime

47- Regarding Daptomycin, which of the following is false?

A- is cyclic lipopeptide antibiotic
B- indicated for treating infections caused vancomycin-resistant enterococci (VRE)
C- it should never be used in the treatment of pneumonia
D- have bacteriostatic effect
E- given IV once daily

94- Chemical structure for penicillins is important for its effect. The nature of R substituent attached to 6-aminopenicillanic acid residue in penicillins affects all the following but except:

A- Susceptibility to bacterial degradative enzymes (B-lactamases).
B- Cross-hypersensitivity
C- Stability to stomach acid
D- Side effect of the drug
E- Antimicrobial spectrum

95- Resistance to Penicillin and other ß lactams can be developed by different mechanisms. Select the correct

A- Modification of target PBPs
B- Impaired penetration of drug to target PBPs.
C- Presence of an efflux pump
D- Inactivation of antibiotics by ß lactamase
E- All of the above.

96- Regarding cephalosporines. Cefotaxime has the following properties EXCEPT:

A- It is highly active against aerobic gram-negative bacteria
B- It is the most active cephalosporin against Pseudomonas aeruginosa
C- It produces an active metabolite
D- It has achieved high cure rates in serious hospital acquired Infections
E- It's 2nd generation cephalosporine

97- Carbapenems are synthetic antibiotics, active against gram positive and gram negative organisms, and anaerobes. All the following are correct relating to Carbapenems except:

A- Act by inhibition of cell wall synthesis
B- Given by I.V administration
C- Imipenem plays a role in empiric therapy
D- Meropenem is known to reach therapeutic levels in bacterial meningitis even without inflammation
E- All of them require coadministration of cilastatin

98- Polymyxins are antibiotics are used in treatment of Gram-negative bacterial infection. All the following are correct relating Polymyxins except

A- Two forms of polymyxin are available in various dosage forms

B- Are cation polypeptides that bind to phospholipids on the bacterial cell membrane
C- Are concentration-dependent bactericidal agents
D- Nephrotoxicity and neurotoxicity are the main cause of drug limitation
E- colistin is only available as a prodrug, which is administered orally or inhaled via a nebulizer

Protein Synthesis Inhibitors:

3- The following statements are true about tetracycline EXCEPT?
A- Broad-spectrum, bacteriostatic & short acting
B- Should be taken with milk or antacids to relieve gastric irritation
C- Concentrated in bone & teeth leading to deformities
D- If outdated may lead to renal tubular dysfunction
E- All the above

4- Which of the following is not true about aminoglycosides?
A- Bactericidal antibiotics used against gram-ve aerobic bacteria
B- Neomycin is taken parentally in hepatic coma
C- Muscle paralysis may occur if taken perioperative
D- Ototoxic & nephrotoxic
E- All the above

5- Resistance to macrolide is associated with
A- Methylation of binding sites on the 50S ribosomal subunit in gram positive organisms
B- The presence of plasmid-associated erythromycin esterase in gram negative organisms
C- Increased activity of efflux mechanisms
D- Decreased drug permeability of the cytoplasmic membrane
E- All the above are correct

18- Which one of the following is the best route of administration and dosing schedule for treatment with aminoglycosides based on the drug's concentration dependent killing property?
A- Oral every 8 hours.
B- Oral every 24 hours.
C- Parenterally by continuous intravenous infusion.
D- Parenterally every 8 hours.
E- Parenterally every 24 hours

20- The following drug is primarily bactericidal
A- Sulfonamides
B- Tetracyclines
C- Aminoglycosides
D- Chloramphenicol
E- Macrolide antibiotics

26- Antimicrobial agent is usually bacteriostatic may causes irreversible aplastic anemia:
A- Tetracycline
B- chloramphenicol
C- Clindamycin
D- Linezolid
E- Telithromycin

99- Regarding properties of tetracyclines, all the following statements are correct Except
A- Their spectrum extended to include protozoa, Mycobacteria and atypical species
B- There are bacteriostatic irreversibly bind to 30S subunit of susceptible organisms
C- The most common mechanism of resistance to Tetracycline is an efflux pump

D- Tetracyclines concentrated well in bone, liver, kidney and skin
E- They are contraindicated during pregnancy and lactation

15- Which of the following antibiotic combinations is inappropriate based on antagonism at the same site of action?

A- Clindamycin and erythromycin
B- Doxycycline and amoxicillin
C- Tigecycline and azithromycin
D- Ciprofloxacin and amoxicillin
E- None of above

100- Some drugs are approved for primary prophylaxis in AIDS patients with low CD4 counts against infections due to mycobacterium avium-intracellular These drugs include

A- Amoxicillin
B- Ceftriaxone
C- Azithromycin
D- Doxycycline
E- Nafcillin

Quinolones, Folic Acid Antagonists, and Urinary Tract Antiseptics

6- Which of the following statements is correct about fluoroquinolones?

A- They have different targets for gram-positive (DNA gyrase) and gram-negative organisms (topoisomerase IV), resulting in bactericidal activity.
B- Ciprofloxacin has enhanced gram-positive activity.
C- A macrolides acetyltransferase variant can acetylate fluoroquinolones, rendering them inactive.
D- These agents carry boxed warnings for tendinitis, tendon rupture, peripheral neuropathy, and CNS effect
E- Both C and D.

7- Sulfonamide given in late pregnancy or to newborn can result in kernicterus because:

A- It stimulates synthesis of bilirubin
B- It displaces bilirubin from plasma protein and results in high free bilirubin concentration
C- It prevents the metabolism of bilirubin
D- it is metabolized to bilirubin
E- None of the above

16- The following statement about folic acid is correct

A- Bacteria need preformed folate to synthesize their own DNA
B- Man can form folate from P-aminobenzoic acid
C- Folate synthesis inhibitors are bactericidal drugs
D- Sulfonamides compete with P-aminobenzoic acid in the metabolic process that leads to folate synthesis
E- Organisms that are insensitive to sulfonamides are those that need to synthesize their own folic acid

89- Regarding antibiotics that are contraindicated in infants and children, the following are correctly matched with the adverse effect EXCEPT

A- Tetracyclines/Teeth and bone deformities
B- Chloramphenicol/Grey baby Syndrome
C- Sulfonamides/Kernicterus
D- Levofloxacin/Ototoxicity
E- Methicillin/Nephritis

90- Some of antibiotics act as Folate Antagonists. Select the antibiotic, which act by this mechanism:

A- Tetracycline
B- Trimethoprim
C- Cefotaxime.
D- Ciprofloxacin
E- Penicillin.

91- Regarding Trimethoprim Which of the following is NOT correct

A- Trimethoprim is 20-to 50-fold more potent than the sulfonamide
B- The drug penetrates the cerebrospinal fluid
C- Adverse effects include me megaloblastic anemia, leukopenia, and granulocytopenia
D- potent inhibitor of bacterial dihydropteroate synthetase
E- Trimethoprim may be used alone in the treatment of acute UTIs and in the treatment of bacterial prostatitis

92- Methenamine, a urinary tract antiseptic, is primarily used for chronic suppressive therapy. Which of the following isn't correct?

A- Adverse effects include gastrointestinal disturbances, acute pneumonitis, and neurologic problems
B- Urea-splitting bacteria that alkalinize the urine, such as Proteus species, are usually resistant to the action of methenamine
C- Methenamine decomposes at an acidic pH of 5.5 or less in the urine, thus producing formaldehyde, which is toxic to most bacteria
D- is contraindicated in patients with hepatic insufficiency.
E- Methenamine is used to treat lower UTIs but is not effective in upper UTIs

105- Fluoroquinolones are well absorbed after oral administration Which of the following antimicrobial agents is not one of the Fluoroquinolone antibiotics

A- Gemifloxacin
B- Ofloxacin
C- Ciprofloxacin
D- Delafloxacin
E- Neomycin

Antimycobacterial Drugs

8- which of the following statements is incorrect about antimycobacterial drugs.

A- Isoniazid, rifampin, ethambutol, and pyrazinamide are preferred because of their high efficacy and acceptable incidence of toxicity
B- Peripheral neuropathy caused by isoniazid can be avoided by using B6 supplementation.
C- Rifampin has many drug interactions due to induction of phase I and II cytochrome P450 enzymes
D- Pyrazinamide interacts with ß subunit of mycobacterial DNA-dependent RNA polymerase.
E- Infections due to streptomycin-resistant mycobacterium may be treated with kanamycin or amikacin.

93- Tuberculosis (TB) is a potentially serious infectious disease that mainly affects the lungs. Which of the following drugs isn't used in the treatment of tuberculosis?

A- Clofazimine
B- Pyrazinamide
C- Ethambutol
D- Isoniazid
E- Rifampin

Antifungal Drugs

9- The active metabolites of flucytosine that responsible for its antifungal activity which result from action of

A- intestinal bacteria
B- cytochrome p450 E1
C- cytochrome p450 A1
D- Gall bladder bacteria
E- None of the above

102- loading dose is an initial higher dose of a drug that may be given at the beginning of a course of treatment before dropping down to a lower maintenance dose. Which of the following drugs requires a loading dose?

A- Micafungin
B- Tavaborole
C- Liposomal amphotericin B
D- Caspofungin
E- Posaconazole

103- A 55-year-old woman presents to the hospital with shortness of breath, fever, and malaise. She has a history of breast cancer and is receiving chemotherapy. Her chest x-ray shows pneumonia, and respiratory cultures are positive for Aspergillus fumigatus. Which is the MOST appropriate choice for treatment?

A- Voriconazole.
B- Amphotericin (B)
C- Fluconazole.
D- Flucytosine
E- Ketoconazole

104- A 22-year-old woman reports a cottage cheese-like vaginal discharge and slight dysuria for 1 week. The patient is diagnosed with vulvovaginal candidiasis. She requests as short a course of treatment as possible due to her busy schedule. Which antifungal is the best choice?

A- Oral fluconazole
B- Topical miconazole
C- Oral terbinafine
D- Topical efinaconazole
E- Clotrimazole

Antiprotozoal Drugs

10- Choose the correct statement(s) about metronidazole

A- It is a drug of choice for amoebic dysentery as well as amoebic liver abscess.
B- It affords the most rapid symptom relief in amoebic dysentery
C- It is the most effective drug in eradicating amoebic cysts from the colon
D- Not used for Giardiasis
E- It is a drug of choice only for amoebic dysentery

11- The antimalarial drugs which avoided in patient have abnormal Electrocardiogram (ECG) is

A- Pyrimethamine
B- Artemisinin
C- Chloroquine
D- Mefloquine
E- quinine

12- The drug of choice for Kala Azar (visceral Leishmaniasis) is :

A- Pentamidine
B- Amphotericin B
C- Sodium stibogluconate
D- Ketoconazole
E- Terbinafine

35- Which of the following drugs has the potential to cause cinchonism

A- Mefloquine
B- Quinine
C- Chloroquine
D- Primaquine
E- Pyrimethamin

48- regarding Toxoplasmosis, Tick the drug used for toxoplasmosis treatment:

A- Chloroquine
B- Tetracycline
C- Imidazole
D- Pyrimethamine
E- Nitazoxanide

101- A 42-year-old man returned from a camping trip and is diagnosed with Giardia lamblia. Which medication would be considered the treatment of choice?

A- Chloroquine
B- Nifurtimox
C- Paromomycin
D- Metronidazole
E- Polymyxins

Anthelminthic Drugs

49- Regarding nematodes treatment, the drug used for strongyloidiasis treatment:

A- niclosamide
B- praziquantel
C- bithionol
D- Ivermectin
E- none of above

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