

[Each correct answer carries 1M and wrong answer carries -0.5M]

- Prior to the administration of Rifampin all patient medication should be examined for potential interactions. At times interaction may result in therapeutic failure and dire consequences. This is because rifampin:
(A) increases basal metabolism
(B) increases the activity of CYP1A2, 2C9, 2C19, 3A4
(C) suicidal substrate for enzymes
(D) inhibitor CYP3A4, 2C19, 2C9, 1A2
- Doctor advise the patient after prescribing this antibiotic not to worry if it produces flu like syndrome. This is an anti-leprotic, anti-tuberculosis antibiotic that acts by inhibiting DNA dependent RNA polymerase enzyme
(A) Rapamycin (B) Rifapentine
(C) Ansamycin (D) Rifampicin
- Beta adrenergic receptor blockers provide relief from angina pectoris and prolong life span of the patient by preventing re-infarction. The main mechanism of action that has bearing on their clinical efficacy
(A) increase myocardial oxygen requirement
(B) decrease myocardial contractility
(C) increase heart rate
(D) myocardial depressant and reduce oxygen demand
- Acute severe bronchial asthma – status asthmaticus is a life threatening condition. Doctors resort to give two or more drugs intravenously to save the life of the patient. The popular drug combination is
(A) Salbutamol nebulization + hydration + hydrocortisone sodium succinate
(B) Salmeterol + Aminophylline
(C) Xylocaine + Ketotifen
(D) Adrenaline + Nedocromil
- An anti-ulcer drug that is useful in acid peptic disease including Zollinger Ellison syndrome is:
(A) Metoclopramide (B) Pirenzepine
(C) Omeprazole (D) Metronidazole
- Modern cardiologists prefer to use preloaded low molecular weight heparin preparation. The advantage is predictable bioavailability and less acute thrombocytopenia. These act by the virtue of direct inhibition of
(A) factor II (B) factor Xa
(C) factor II & X (D) factor VIII
- A doctor was treating patient suffering from chronic inflammatory disease. He administered a long acting synthetic glucocorticoid as his choice
(A) Dehydroepiandrosterone (B) Hydrocortisone
(C) Betamethasone (D) Fludrocortisol
- An adult educated patient enquired her physician that why penicillin is safe except hypersensitivity. Doctor explained the mechanism of action of penicillin as mentioned below discarding one of the statements
(A) binds to penicillin binding proteins
(B) causes loss of inhibitors of autolysins
(C) inhibits bacterial protein synthesis
(D) inhibits transpeptidase and cross linking
- A hypertensive patient who is on ramipril therapy has been advised to add spironolactone to ensure optimal control of blood pressure. As a result, the patient developed electrolyte imbalance presenting
(A) Hyponatremia (B) Hypernatremia
(C) Hyperkalemia (D) Hypokalemia

10. Prophylaxis for tuberculosis is recommended to prevent active disease. Doctors prefer to use isoniazid or rifampicin. One of the contraindication for chemoprophylaxis of isoniazid is
- (A) Myopathy (B) Psychoses
(C) Active hepatitis (D) Hypertension
11. Clinical efficacy of clofazimine in leprosy is attributable to the following dynamic mechanisms, leaving one
- (A) inhibits-microbial K⁺ transport
(B) generation of hydrogen peroxide
(C) preventing DNA replication
(D) membrane disruption
12. A physician has prescribed both H₂ receptor blocker ranitidine and mucosal protective sucralfate for an advanced elderly acid peptic disease male patient. He cautioned the patient not to take these two drugs simultaneously. At least 6-8 hours time gap must be given the reason being
- (A) co administration aggravates acid secretion
(B) sucralfate needs acidic pH
(C) ranitidine is not absorbed
(D) ranitidine elimination is at stake
13. An astute diabetologist did not agree with this insulin dependent diabetic patient to combine rosiglitazone with insulin. He informed the patient that it may precipitate
- (A) renal failure + convulsion
(B) peripheral edema
(C) myocarditis
(D) hypocholesterolemia
14. Pharmacokinetic features of drug often are responsible for observed side effects. An example for this is metallic taste on administration of metronidazole. This is due to
- (A) salivary excretion
(B) nitro reduction
(C) high volume of distribution
(D) slow metabolism
15. A patient aged 55 years is on long term steroid therapy, developed the following adverse drug reactions other than this
- (A) developed steroid dependence
(B) super infection
(C) Cushing's habitus
(D) Addison's disease
16. A patient who was taking furosemide high doses on chronic basis visited his family physician. On checking the electrolyte level the family physician has noted this adverse reaction
- (A) Hypermagnesemia (B) Hypoglycemia
(C) Hypokalemia (D) Hypercalcemia
17. Chloroquine administration at recommended doses and specified duration is safe. On prolonged administration chloroquine may accumulate in melanin containing tissue which results in
- (A) Nausea Vomiting (B) Convulsions
(C) Blurred vision (D) Hypertension
18. A 45 year old woman taking metronidazole for trichomoniasis came to the doctor's clinic with clinical features of malaria. On laboratory confirmation doctor has prescribed chloroquine. Doctor did not restrict the use of metronidazole by the patient. After 2 days woman reported with
- (A) Acute angina pectoris (B) Acute hyperthermia
(C) Acute migraine (D) GI disturbance
19. Physician's choice for pituitary diabetes insipidus is desmopressin. Bed time desmopressin therapy to control nocturnal enuresis is given by
- (A) Intravenous (B) Subcutaneous
(C) Intramuscular (D) intra nasal
20. Physicians always emphasize prior to administration of this anti-tuberculosis drug for liver function test. These tests should be repeated at frequent interval during therapy. This drug is also known to cause hyperuricemia since it is known to precipitate acute gout
- (A) Rifampin (B) Pyrazinamide
(C) Capreomycin (D) Streptomycin

21. For the control of asthmatic attack in pregnant woman the bronchodilator used should be free from tocolytic action. The physician opted bronchodilator is

- (A) Formoterol (B) Bambuterol
(C) Nedocromil (D) Aminophylline

22. Lansoprazole like drugs inhibit gastric acid synthesis. A patient was interested in knowing the mechanism of action of this drug and he browsed the internet for needed information and came to know it acts by virtue of inhibiting this pump

- (A) Electron (B) Calcium
(C) Proton (D) Sodium

23. An aminoglycoside antibiotic which is not absorbed from the gastrointestinal tract is given orally in one of these protozoal infections

- (A) Malaria (B) Visceral leishmaniasis
(C) Amoebiasis (D) Trichomoniasis

24. A gynecologist is looking for a progesterone receptor antagonist to induce abortion. This drug is administered as single dose invariably with cervical ripening prostaglandin synthetic analogue

- (A) Mifepristone (B) Tamoxiphen
(C) Flutamide (D) Spironolactone

25. Inadvertent administration of diuretics for long duration may result in

- (A) Dilutional hyponatremia (B) Hypertension
(C) Renal failure (D) Convulsion

26. The clinical pharmacist of the hospital flashed a query after reading the heart failure patient prescription of a newly joined cardiologist. Pharmacist sought the rationale of combination diuretic therapy comprising furosemide + triamterene. The explanation he was looking for

- (A) increases extra cellular volume
(B) enhances preload and peripheral resistance
(C) decrease heart rate and reduce cardiac contraction
(D) no hypokalemia

27. Salmonella typhi infection is treated with different types of antibiotics. Mono drug therapy would suffice the need. The penicillin that is often recommended

- (A) Amoxicillin (B) Ticarcillin

(C) Sulbactam

(D) Benzyl penicillin

28. Laboratory investigation of an oncological patient revealed that the elevation of serum calcium level is above 12mg/dl. The clinical features noted are constipation, anorexia, hematuria and nephrolithiasis. Physicians has listed following drugs and told the patients not to take

- (A) Bisphosphonates (B) Oral sodium phosphate
(C) Hydrochlorothiazide (D) Calcitonin

29. It is common to combine amoxicillin and dicloxacillin administered orally in moderate to severe mixed bacterial infection. The purpose is to extend the anti bacterial spectrum of activity. Dicloxacillin is resistant to this bacterial enzyme unlike ampicillin

- (A) Transpeptidase (B) dihydro folate reductase
(C) Beta lactamase (D) Glucuronidase

30. Physician's choice of oral anti thyroid drug for the management of hyperthyroidism in pregnant women is propylthiouracil. Propylthiouracil acts by several mechanisms but not this

- (A) Inhibits thyroid peroxidase
(B) Blocks coupling process
(C) Arrests thyroid receptor synthesis
(D) Inhibits conversion of thyroxine

31. Doctors advice that one of the groups of drugs listed below should not be used for acid peptic disease management

- (A) Mucosal protectives
(B) Proton-pump inhibitors
(C) Prostaglandin synthesis inhibitor
(D) Acid neutralizers

32. A neonate who received chloramphenicol for two days started showing vomiting, irregular and rapid respiration, abdominal distention, cyanosis and passage of loose green stools. Next day baby has become flaccid and hypothermic. This is known as

- (A) Marfan's syndrome
(B) Gray baby syndrome
(C) Turner's syndrome
(D) Metabolic syndrome

33. A man aged 58 years with a history of heart failure was brought to the emergency ward with breathlessness, edema of the dorsum of the foot. Patient's B.P. read as 185/102mmHg. Chest auscultation revealed rhonchi. Doctor in charge has decided to administer a diuretic intravenously to relieve acute pulmonary edema. The drug selected is
(A) Mannitol (B) Furosemide
(C) Acetazolamide (D) Spironolactone

34. An angina pectoris patient was warned by physician not to take nitrates with sildenafil. This may result in significant fall of
(A) Heart rate (B) Blood pressure
(C) Respiratory rate (D) Glomerular filtration rate

35. In clinical practice prednisolone is commonly used as an anti allergic, anti-inflammatory, immunosuppressant drug. It suppresses inflammation by several mechanisms. Clinicians do not agree with this
(A) generation of lipocortin
(B) suppression of fibroblast proliferation
(C) inhibition of pro-inflammatory cytokines
(D) stimulates phospholipase A2

36. A patient aged about 40 years was admitted to the hospital for osteomyelitis caused by Staphylococcus aureus with insidious onset of vague pain, local tenderness and fever. It is proved to be methicillin sensitive. In charge doctor administered this parenteral antibiotic at the dose of 9-12gm/day in 6 divided doses
(A) Nafcillin (B) Vancomycin
(C) Rifampin (D) Linezolid

37. Doctors discourage and express concern over long term use of stimulant laxatives by giving following reasons listed below. The incorrect reason is
(A) could lead to dependence
(B) destruction of myenteric plexus
(C) causes colonic atony and dilatation
(D) Carcinogenic

38. A male patient aged 58 years was brought to physician's clinic. On evaluation, patient's B.P. read as 180/103mmHg and ECG revealed idio ventricular

rhythm. Physician has decided to use an anti hypertensive anti arrhythmic drug
(A) Ramipril (B) Magnesium sulphate
(C) Disopyramide (D) Verapamil

39. A doctor on evaluation of a patient aged 43 years concluded at the end that the patient is suffering from orthostatic hypotension. He decided to administer i.v. fluids along with a synthetic mineralocorticoid
(A) 9 alpha fludrocortisone (B) Mometasone
(C) Dexamethasone (D) Fluticasone

40. It is common to administer pyridoxine along with INH in chemotherapy of tuberculosis. Doctors do take care that the dose of pyridoxine should not exceed 150mg/day. Pyridoxine nullifies this adverse effect caused by INH
(A) Nephropathy (B) Peripheral Neuritis
(C) Retinopathy (D) Cardio myopathy

41. A senior doctor advised his junior to prescribe a fifth drug to the regimen for a tuberculosis patient as four drugs regimen is not providing clinical benefit. Junior doctor followed the direction given to him and he knew that his fifth drug is to be given by intramuscular route for 60-90 days
(A) INH (B) Ethambutol
(C) Streptomycin (D) Pyrazinamide

42. Physician is aware of glucocorticoid absolute contraindication, pointed out this condition to the patient
(A) Systemic lupus erythematosus
(B) Mental depression
(C) Rheumatic carditis
(D) Cushing's syndrome

43. An activated endogenous protein is known to have anti thrombotic, anti inflammatory and profibrinolytic actions. This has been recommended for the treatment of septicemic shock to have survival benefit. Hepatic synthesis of this protein is blocked by warfarin and causes bleeding tendencies
(A) Platelet factor IV (B) Protein-C
(C) Thrombomodulin (D) Albumin

44. Physicians advised the patient on prescribing this antibiotic not to expose to sunlight. Photosensitization is severe with this tetracycline

- (A) Demeclocycline (B) Chlortetracycline
(C) Minocycline (D) Tigecycline

45. An amoebiasis patient was treated by the doctor repeatedly. The patient reported to the doctor again. Doctor taking all precautionary measures wanted to use this reserve drug which is cardiotoxic alkaloid

- (A) Dehydroemetine (B) Diloxanide
(C) Emetine (D) Tinidazole

46. Perennial metformin therapy for diabetic mellitus is known to cause megaloblastic anemia, anorexia, taste disturbance. But doctors assure diabetic patient the advantage of metformin is

- (A) Weight gain
(B) Suppress appetite
(C) Regeneration of beta cells
(D) Decreased mortality rates

47. Combination drug therapy with statin is widely accepted mode of the management of dyslipidemic major cardiovascular patient. Consequent to this, statin produced myopathy may be enhanced with co-administration of

- (A) Niacin high dose (B) Ezetimibe
(C) Colesevelam (D) propranolol

48. A pharmacologist while explaining the pharmacodynamics of anti tuberculosis drugs emphasized that these drugs act by several mechanisms. Evidently the drug that acts mainly by inhibiting mycolic acid synthesis is

- (A) Pyrazinamide (B) Ethambutol
(C) Rifampicin (D) Isoniazid

49. Anti microbial drug therapy may induce fresh clinical problems. Following are few syndromes precipitated by commonly used chemotherapeutic agents. Likewise, dapsone can cause

- (A) Red man's syndrome
(B) Erythema nodosum leprosum
(C) Flu like syndrome
(D) Fanconi syndrome

50. Drugs that inhibit angiotensin converting enzyme are invariably pro-drugs. However, the exception does exist. Example for the directly acting angiotensin converting enzyme inhibitor is

- (A) Enalapril (B) Irbesartan
(C) Perindopril (D) Lisinopril

51. Gastroenterologist preferred to use dronabinol in patients who have failed to respond adequately to conventional anti-emetics. Dronabinol is a constituent of psychoactive cannabis chemicals. Its major advantage

- (A) Appetite stimulant action
(B) Analgesic effect in neuropathic pain
(C) Lower abuse potential
(D) Somnolence effect

52. Physician launches combination of first line anti-tubercular drugs regimen readily. The reason is that these are well tolerated and more efficacious. The most commonly used combination consists of

- (A) ethambutol, INH, rifampicin, kanamycin
(B) streptomycin, INH, amikacin, ofloxacin
(C) Pyrazinamide, ethambutol, streptomycin, moxifloxacin
(D) INH, pyrazinamide, ethambutol, rifampicin

53. A physician usually prescribes metronidazole to combat pseudomembranous colitis. In this condition metronidazole acts against

- (A) penicillin resistant *S. pneumoniae*
(B) *Listeria monocytogenes*
(C) *Haemophilus influenza*
(D) *Clostridium difficile*

54. A male obese patient aged 46 years visited a cardiologist. On evaluation cardiologist has declared this patient as dyslipidemic and hypertensive. He advised the patient to go for atenolol + atorvastatin drug therapy. Atorvastatin inhibits cholesterol synthesis arresting the rate limiting step by binding to

- (A) Acetyl CoA (B) Formyl CoA
(C) HMG CoA (D) Succinyl CoA

55. A gastroenterologist is very much pleased to prescribe metronidazole for elective gastro intestinal

surgery and gastric ulcer as well. The rationale for the use of metronidazole in peptic ulcer is

- (A) to arrest the synthesis
- (B) to control anaerobic infections in the stomach
- (C) to prevent H. pylori colonization
- (D) to enhance mucus secretion

56. Niacin taking patient's often complaint this to their family physicians

- (A) Flushing
- (B) Reye's syndrome
- (C) Postural hypertension
- (D) Rhabdomyolysis

57. A physician having encountered multi drug resistant plasmodium falciparum malaria in a patient has selected this rapidly acting and potent drug for intravenous administration

- (A) Artemisinin
- (B) Clindamycin
- (C) Primaquine
- (D) Amodiaquine

58. A female patient aged 45 years had the following clinical features fever, malaise, headache, sore throat, lymphadenopathy and atypical lymphocytosis. Doctor diagnosed this condition as toxoplasmosis. He prescribed this combination of drug with folinic acid

- (A) Cotrimoxazole
- (B) dapsone + doxycycline
- (C) rifampin + gentamycin
- (D) pyrimethamine + sulphadiazine

59. The iodine preparation having 8.02 days as physical half life used orally for thyroid carcinoma is

- (A) I¹³¹
- (B) I¹³²
- (C) I¹²¹
- (D) I¹³⁵

60. An endocrinologist has prescribed intra nasal desmopressin for a patient suffering from

- (A) drug induced water intoxication
- (B) diabetic mellitus
- (C) diabetic neuropathy
- (D) diabetes insipidus

61. A bronchial asthma patient who is on theophylline therapy suddenly developed paroxysmal supra ventricular tachycardia. The family physician had adenosine in his emergency kit. He started giving adenosine without knowing the nature of interaction between adenosine and theophylline

- (A) Synergism
- (B) Antagonism

- (C) Potentiation
- (D) Additive effect

62. Phosphodiesterase enzyme inhibition as well as purinergic receptor antagonism enhances translocation of calcium as the mechanism of action of an anti asthmatic drug. Doctor was looking for

- (A) Isoprenaline
- (B) Theophylline
- (C) Beclomethasone
- (D) Oxytropium

63. A cardiologist observed that his patient is suffering from severe vasospastic angina. Immediately he directed the staff incharge to give

- (A) Metoprolol
- (B) Aspirin
- (C) Nitroglycerin
- (D) Clopidogrel

64. A neurologist who is treating an elderly schizophrenic patient with haloperidol cautioned the patient not to use metoclopramide as antiemetic. The reason being metoclopramide precipitates

- (A) Cholestatic jaundice
- (B) Multiple sclerosis
- (C) Cardiac arrhythmias
- (D) Parkinsonism

65. All the first line anti-tuberculosis drugs induce hepatitis. Nevertheless, an anti tubercular antibiotic that is free from hepatotoxicity but can cause ototoxicity, nephrotoxicity

- (A) Rifampin
- (B) Isoniazide
- (C) Pyrazinamide
- (D) Streptomycin

66. A microbiologist was explaining the mechanism of development of bacterial resistance to tetracycline by discarding one of the mechanisms listed below

- (A) increased efflux & decreased influx
- (B) mutation
- (C) ribosomal protection
- (D) enhanced rate of hepatic metabolism

67. A physician warned his acid peptic disease patient about irrational chronic omeprazole therapy. He cautioned the patient that it may induce

- (A) Hypogastrinemia
- (B) Constipation
- (C) Achlorhydria
- (D) Psychosis