1) Constitutive activity is the physiological effect that may be produced sometime:
   A) In presence of an Inverse agonist
   B) In absence of an agonist
   C) In presence of partial agonist
   D) In presence of an antagonist

2) Which statement is not true?
   A) Enalapril is pro-drug
   B) Bacampicilin converts in body into ampicilin
   C) Prednisolone is prodrug of prednisone
   D) Diazepam produces active metabolite oxazepam

3) All are pharmacogenetic conditions except:
   A) G-6-PD deficiency
   B) Adenosine deaminase deficiency
   C) Malignant hyperthermia
   D) Coumarin insensitivity

4) Which of the following drugs is not effectively removed by dialysis:
   A) Digoxin
   B) Salicylates
   C) Methanol
   D) Ethylene glycol

5) After the intravenous injection of phenoxybenzamine the peak effect is obtained at about:
   A) Immediate
   B) 15 minutes
   C) 30 minutes
   D) 1 hour

6) Fenolodopam used in hypertensive emergencies, may act as a vasodilator:
   A) By increasing cAMP in vascular smooth muscle
   B) By increasing cGMP in vascular smooth muscle
   C) By decreasing Calcium influx in vascular smooth muscle
   D) By preventing depolarization of vascular smooth muscle

7) Oxethazaine is:
   A) A topical anaesthetic used orally in gastritis
   B) An anticholinergic drug for motion sickness
   C) An antihistaminic drug for vomiting
   D) None of the above

8) Intravenous regional anaesthesia is mainly used for:
   A) Upper abdomen surgery
   B) Lower abdomen surgery
   C) Thoracic surgery
   D) Upper limb surgery
9) Following are the indirect acting sympathomimetics except
A) Phenmetrazine
B) Modafinil
C) Methylphenidate
D) Dexmedetomidine

10) Which of the following is correct regarding drug interactions with nondepolarizing neuromuscular blockers (NMBs)?
A) Desflurane reduces the effects of nondepolarizing NMBs
B) Cholinesterase inhibitors increase the effects of nondepolarizing NMBs
C) Aminoglycosides increase the effects of nondepolarizing NMBs
D) Calcium channel blockers reduce the effect of nondepolarizing NMBs

11) A beta adrenoceptor blocker which is not likely to be effective in improving the essential skeletal muscle tremors is:
A) Propranolol
B) Timolol
C) Nadolol
D) Betaxolol

12) A patient developed anaphylactic shock was treated with adrenaline. However, the patient did not respond fully to this treatment. History revealed that the patient was taking the following hypertensive which could have prevented the effect of adrenaline:
A) Atenolol
B) Propranolol
C) Doxazosin
D) Acebutalol

13) Most common dose related adverse drug reaction of phenytoin that requires dosage adjustment include:
A) Nystagmus
B) Loss of smooth extra ocular pursuit movements
C) Diplopia and Ataxia
D) None of the above

14) All statements are true regarding Cilostozol except
A) It is PDE-III inhibitor
B) It has vasodilating activity
C) It has a favourable effect on lipid profile
D) Not extensively metabolised by CYP isoenzymes

15) Loading dose is usually given to start therapy with all anti platelet agents EXCEPT:
A) Ticagrelor
B) Clopidogrel
C) Prasugrel
D) Dipyridamole

16) Which of the following reduces Triglyceride synthesis in liver by primarily inhibiting the lipolysis in adipose tissue and thus limiting the available free fatty acids required for TG synthesis:
A) Lovastatin
B) Niacin
C) Cholestyramine
D) Fenofibrate
17) All are true regarding Glinides except –
A) They stimulate insulin secretion
B) Bind to distinct site on beta cells thus closing ATP sensitive K⁺ channel
C) Categorized as “Post Prandial Glucose Regulators”
D) Should always be combined with sulfonylurea

18) Following Dopamine agonist can cause a modest reduction in HbA1c and has a glucose lowering effect in type-2 diabetes:
A) Aphmorpine
B) Bromocriptine
C) Rotigotine
D) Ropinirole

19) Plasma half life of the following may be increased significantly with concurrent use of cimetidine –
A) Pramipexole
B) Rophinirole
C) Apromophine
D) Bromocrptine

20) Among the drugs used in patients of multiple sclerosis, following can cause ‘first-dose bradycardia’
A) Interferon β1a
B) Fingolimod
C) Dimethy fumarate
D) Glatiramer

21) A potassium channel blocker, approved for symptomatic treatment of Multiple sclerosis is
A) Dofetilide
B) Dronedarone
C) Sotalol
D) Dalfampridine

22) All the following agents may cause cognitive impairment, including memory problems when used at recommended doses except –
A) Diphenhydramine
B) Zolpidem
C) Phenobarbital
D) Ramelteon

23) Which of the following agents has a rapid anxiolytic effect and would be best for the acute management in anxiety?
A) Buspirone
B) Venlafaxine
C) Lorazepam
D) Escitalopram

24) An antidepressant that may be useful in relieving the pain associated with fibromyalgia is :
A) Dapoxetine
B) Citalopram
C) Fluoxetine
D) Duloxetine
25) The antidepressant which is also available in a transdermal delivery system include
   A) Tranylcypromine
   B) Phenelzine
   C) Isocarboxazid
   D) Selegiline

26) Which among the following antidepressant acts mainly through its antagonistic action on 5HT\textsubscript{2A} and alpha\textsubscript{2} receptors:
   A) Doxepin
   B) Moprotiline
   C) Mirtzapine
   D) Selegiline

27) Which is the following antidepressant is contraindicated in a patient of angle closure glaucoma
   A) Amitriptyline
   B) Sertraline
   C) Bupropion
   D) Mirtzapine

28) An adolescent male is newly diagnosed with schizophrenia. Which of the following antipsychotic agents may have the best chance to improve his apathy and blunted affect?
   A) Chlorpromazine
   B) Fluphenazine
   C) Haloperidol
   D) Risperidone

29) Which one of the following antipsychotics has been shown to be a partial agonist at the dopamine D\textsubscript{2} receptor?
   A) Aripiprazole
   B) Clozapine
   C) Haloperidol
   D) Risperidone

30) Which of the following antipsychotic agents is most associated with the possibility of a haematological dyscrasia such as agranulocytosis in a patient being treated for schizophrenia
   A) Chlropromazine
   B) Buspirone
   C) Lithium
   D) Clozapine

31) Which is the following drugs is most useful for the treatment of absence seizures?
   A) Rufinamide
   B) Tiagabine
   C) Levetiracetam
   D) Lamotrigine

32) Which is the following is a first-line medication for generalized tonic-clonic seizures?
   A) Ethosuximide
   B) Felbamate
   C) Clonazepam
   D) Topiramate
33) Which of the following is a potent analgesic but a weak anaesthetic?
A) Etomidate
B) Halothane
C) Midazolam
D) Nitrous oxide

34) An elderly patient with asthma and low blood pressure requires anaesthesia for an emergency surgical procedure. Which of the following agents would be most appropriate for inducing anaesthesia in this patient?
A) Desflurane
B) Ketamine
C) Propotol
D) Thiopental

35) Adrenaline causes vasoconstriction in all of the following vessels except
A) Gut
B) Cerebral
C) Cutaneous
D) Renal

36) All of the following are bronchoconstrictor except
A) PGE$_2$
B) PGF$_{2\alpha}$
C) LTC$_4$
D) LTD$_4$

37) Platelet activation factor has all characters except
A) Produces platelets aggregation and release reaction
B) Chemotactic to neutrophils, eosinophila and monocytes
C) Vasoconstrictor to most of the blood vessels
D) Bronchoconstrictor

38) Allopurinol:
A) Increases the metabolism of theophyline
B) Decreases the metabolism of theophyline
C) Increases oral absorption of theophyline
D) Decreases oral absorption of theophyline

39) All of the following have receptors at cell membrane except
A) Insulin
B) Oxytocin
C) Adrenaline
D) Thyroxine

40) Cosyntropin test is for:
A) Diagnosis of adrenal insufficiency
B) Diagnosis of thyroid insufficiency
C) Diagnosis of pituitary insufficiency
D) None of the above

41) Radioactive iodine$^{131}$ emits following rays
A) X rays and Beta rays
B) Beta rays and Alpha rays
C) Delta rays and Beta rays
D) Delta rays and X rays
42) Tyrosine protein kinase activity is present at
A) Alpha subunit of insulin receptors
B) Beta subunit of insulin receptors
C) Gamma subunit of insulin receptors
D) Delta subunit of insulin receptors

43) Which of the following drugs is metabolized by plasma pseudocholinesterase?
A) Atracurium
B) Cis-atracurium
C) Methenamine hippurate
D) Mivacurium

44) All of the following drugs may be useful in Hereditary Angioedema, except
A) Icatibant
B) Danazol
C) Midodrine
D) Tranexamic acid

45) A disulfiram like reaction with Alcohol is seen with all of the following, except
A) Procarbazine
B) Carbamazepine
C) Chlorpropamide
D) Cefoperazone

46) Biliary Pseudolithiasis is a side effect of high doses of:
A) Amphotericin - B
B) Imipinem
C) Ceftriaxone
D) Vancomycin

47) Shortest break period to switch over from a MAO inhibitor to another antidepressant will be observed after stopping the therapy with
A) Moclobemide
B) Tranylcypromine
C) Phenelzine
D) Selegiline

48) Drug of choice for primary therapy of invasive aspergillosis is
A) Fluconazole
B) Voriconazole
C) Flucytosine
D) Itraconazole

49) False statement regarding Raloxifene is that it –
A) Increases bone density without increasing the risk of endometrial cancer
B) Decreases risk of invasive breast cancer
C) Decreases risk of venous thromboembolism
D) Decreases Total Cholesterol

50) Chopidogrel therapy is likely to be ineffective in following patients
A) Poor CYP 2D6 metabolizer
B) Fast CYP 1A2 metabolizer
C) Poor CYP 2E1 metabolizer
D) Poor CYP 2C19 metabolizer
51) Postmenopausal female developed osteoporotic vertebral fracture. Which one of the following is likely to reduce her pain of osteoporotic fracture:
A) Calcitonin
B) Zoledronic acid
C) Denosumab
D) Teriparatide

52) An alcoholic male suffering from Hepatic cirrhosis had ascites and oedema. Which one of the following would be most appropriate choice
A) Cholrlthalidone
B) Spinorolactone
C) Furosemide
D) Hydrochlopthiazide

53) Which one of the following is a side effect of Amlodpine
A) Bradycardia
B) Cough
C) Ankle edema
D) QT prolongation

54) A patient on antipsychotic medication developed muscle rigidity, fever, altered mental status & stupor, unstable blood pressure and myoglobinemia. Which one of the following drugs may be helpful
A) Gabapentin
B) Amantadine
C) Bromocriptide
D) Pramipexole

55) A patient of cardiovascular disease needs a Non-Sterordal Anti inflammatory drug for some other ailment. Which one of the following appear to be least likely to be harmful
A) Ibuprofen
B) Piroxicam
C) Inodomethacin
D) Paracetamol

56) All statements are correct except
A) Inhalation of CO\textsubscript{2} can accelerate induction and recovery of general anaesthesia
B) Inhalation of CO\textsubscript{2} produces cerebral vasodilatation
C) Inhalation of CO\textsubscript{2} stimulates respiration
D) Intercostal muscles paralysis occurs in phase I of general anaesthesia

57) Amongst following maximum blood : Gas partition coefficient is with
A) Nitrous oxide
B) Desflurane
C) Halothane
D) Isoflurane

58) Which of the following statement regarding Tapentadol is not correct
A) It is an agonist at the mu receptor
B) It is an inhibitor of Nor-epinephrine uptake
C) Metabolised mainly by glucuronidation
D) Dose should be reduced in moderate renal impairment
59) Which of the following opioids is the best choice for treating pain associated with diabetic peripheral neuropathy
A) Morphine  
B) Tapentadol  
C) Codeine  
D) Buprenorphine

60) Which of the following is correct regarding digoxin when used for atrial fibrillation
A) Digoxin works by blocking voltage-sensitive calcium channels  
B) Digoxin is used for rhythm control in patients with atrial fibrillation  
C) Digoxin increases conduction velocity through the AV node  
D) Digoxin levels of 1 to 2 ng/mL are desirable in the treatment of atrial fibrillation

61) In which disease state is cilostazol contraindicated
A) Peripheral arterial diseases  
B) Gout  
C) Heart failure with reduced ejection fraction  
D) Osteoporosis

62) Which is considered “fibrin selective” because it rapidly activates plasminogen that is bound to fibrin
A) Alteplase  
B) Fondaparinux  
C) Streptokinase  
D) Urokinase

63) All are true statements regarding Rifabutin except:
A) It is preferred in AIDS patients taking PIs or NNRTIs  
B) It is more potent inducer of CYP 450 enzymes than Rifampicin  
C) It can cause skin hyperpigmentation  
D) It can cause neutropenia

64) A 56 year old man presents to the emergency room with complaints of swelling, redness, and pain in his right leg. The patient is diagnosed with acute DVT and requires treatment with an anticoagulant. All of the following are approved for treatment of this patient’s DVT except
A) Rivaroxaban  
B) Dabigatran  
C) Enoxaparin  
D) Heparin

65) A 58 years old man receives intravenous alteplase treatment for acute stroke. Five minutes following completion of alteplase infusion, he develops orolingual angioedema. Which of the following drugs may have increased the risk of developing orolingual angioedema in this patient:
A) ACE inhibitor  
B) GP IIb/IIIa receptor antagonist  
C) Phosphodiesterase inhibitor  
D) Thiazide diuretic

66) Drug that is misused in sexual assaults or so called “date-rapes”
A) Gepirone  
B) Flunitrazepam  
C) Midazolam  
D) Zaleplon
67) A hallucinogenic drug, commonly known as Ecstasy or Molly and was popularized among those attending late-night “rave” parties  
A) Bultylone  
B) Mehtylene dioxyprovalerone  
C) Methylene dioxymethamphetamine  
D) Lysergic acid diethylamide (LSD)

68) Following statement regarding Ranolazine are true except that it  
A) Inhibits the late phase of the sodium current  
B) Does not prolong QT interval  
C) Has antianginal as well as antiarrythmic properties  
D) Reduces intracellular sodium & calcium overload

69) Following statement regarding Fondaparinux are correct except that it :  
A) Is a synthetic derivative of L-arginine  
B) Selectively inhibits only factor Xa  
C) Is approved for prophylaxis of various thromboembolism  
D) Is eliminated in the urine mainly as unchanged drug

70) The anion-exchange resin that can be used in type-2 diabetes due to the glucose-lowering effects  
A) Cholestyramine  
B) Colestipol  
C) Colesevelam  
D) None of the above

71) “Monday morning disease” occurs in workers of chemical industries due to exposure to  
A) Organophosphates  
B) Pentylenetetrazole  
C) Organic Nitrate  
D) Methylxanthines

72) Sodium bicarbonate is not preferred as an oral antacid for long term use because  
A) It is a weak antacid  
B) Systemic absorption can produce transient metabolic alkalosis  
C) It can increase the Flatulence  
D) It can aggravate the pain of peptic ulcer

73) Following statement are true regarding Hydroxyurea except that:  
A) It can reduce the frequency of painful sickle cell crises  
B) It can be used to treat chronic myelogenous leukaemia  
C) It can be used to treat polycythemia vera  
D) It apparently decreases the foetal haemoglobin levels

74) Out of the following drugs the antimicrobial that can be given as one time dose for the treatment of urinary treat infection is:  
A) Aztreonam  
B) Vancomycin  
C) Fosfomycin  
D) Telavanacin
75) Following lipopeptide antibiotic should never be used in the treatment of pneumonia (since it is inactivated by pulmonary surfactants):
A) Linezolid
B) Daptomycin
C) Dalfopristin
D) All of the above

76) 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

77) A 30 year old pregnant female has cellulitis caused by MRSA. Which of the following antibiotics would be the most appropriate option:
A) Doxycycline
B) Clindamycin
C) Quinupristin/dalfopristin
D) Tigecycline

78) Pseudotumor cerebri can occur as an adverse reaction after long term therapy with:
A) Tetracyclines
B) Clindamycin
C) Rifampicin
D) Ciprofoxacin

79) Following are possible uses of androgens except:
A) Testicular failure in children
B) Hypopituitarism
C) Hereditary angioneurotic edema
D) Carcinoma of breast in male

80) All of the following decrease therapeutic effects of levodopa except:
A) Butyrophenones
B) Phenothiazines
C) Metoclopramide
D) Pergolide

81) Which of the following phenothiazine has least anti-emetic effect:
A) Thioridazine
B) Chlorpromazine
C) Thiothixene
D) Trifluoperazine

82) Which butyrophenone is also used for producing neuroleptanalgesia:
A) Flupenthixol
B) Droperidol
C) Fentanyl
D) Ketamine
83) Which statement is false:
A) Blockade of dopaminergic system in limbic system produces antipsychotic effect of chlorpromazine
B) Blockade of dopaminergic system in basal ganglia produces extrapyamidal symptoms
C) Blockade of dopaminergic system in CTZ induces vomiting by chlorpromazine
D) Chlorpromazine increases proclactin secretion

84) Morphine reduces all the following except:
A) Follicle stimulating hormone
B) Adrenocorticotropic hormone
C) Luteinizing hormone
D) Growth hormone

85) Which statement is false regarding verapamil:
A) It prolongs A-V nodal effective refractory period
B) It has negative inotropic action’
C) It increases P-R interval
D) It decreases R-R interval

86) Intravenous furosemide is used for rapid control of symptoms in Acute LVF. It provides quick relief of dyspnoea by:
A) Producing bronchodilation
B) Causing rapid diuresis and reducing circulating blood volume
C) Stimulating left ventricular contractility
D) Causing venodilation

87) Therapeutic effects of warfarin appear only when
A) Synthesis of clotting factors is reduced by 5%
B) Synthesis of clotting factors is reduced by 10%
C) Synthesis of clotting factors is reduced by 20%
D) Synthesis of clotting factors is reduced by 40%

88) All of the following are plasminogen inhibitors except:
A) Epsilon Amino Caprioic Acid
B) Tranexamic acid
C) Aprotinin
D) Kallikrein

89) All of the following can produce constipation except:
A) Aluminium hydroxide gel
B) Calcium carbonate
C) Magnesium carbonate
D) Nifedipine

90) Which of the following is not a side effect of metoclopramide:
A) Constipation
B) Muscle dystonia
C) Gynaecomastia
D) Galactorrhoea

91) All of the following sulphonamides are short acting except:
A) Sulfisoxazole
B) Sulfamethizole
C) Sulfadiazine
D) Sulfadoxine
92) Which is most potent tetracycline:
A) Doxycycline  
B) Minocycline  
C) Demeclocycline  
D) Methacycline

93) Which of the following NSAID has good tissue penetrability with concentration in synovial fluid:
A) Ketorolac  
B) Diclofenac sodium  
C) Sulindac  
D) Piroxicam

94) QTc prolongation in ECG can be observed with all of the following except
A) Procainamide  
B) Sotalol  
C) Sparfloxacin  
D) Verapamil

95) The Nitrate which undergoes little first pass metabolism is:
A) Isosorbide mononitrate  
B) Nitroglycerine  
C) Pentaerythritol tetranitrate  
D) Isosorbide dinitrate

96) Which of the following is most potent local anaesthetic:
A) Dibucaine  
B) Cocaine  
C) Lignocaine  
D) Bupivacaine

97) Narconalysis of criminals is done by giving:
A) Thiopentone  
B) Opium  
C) Diazepam  
D) Ketamine

98) Most potent opioid among the following is:
A) Alfentanil  
B) Fentanyl  
C) Sufentanil  
D) Remifentanil

99) Filgrastim is used for the treatment of:
A) Neutropenia  
B) Anaemia  
C) Polycythemia  
D) Neutrophilia

100) The following anti ulcer drug DOES NOT act by reducing the secretion of or neutralizing gastric acid
A) Megaldrate  
B) Sucralfate  
C) Misoprostol  
D) Omeprazole