

ENTRANCE EXAMINATION FOR ADMISSION, MAY 2013.

M.Sc. (MEDICAL PHARMACOLOGY)

COURSE CODE : 504

Register Number :

*Signature of the Invigilator
(with date)*

COURSE CODE : 504

Time : 2 Hours

Max : 400 Marks

Instructions to Candidates :

1. Write your Register Number within the box provided on the top of this page and fill in the page 1 of the answer sheet using pen.
2. Do not write your name anywhere in this booklet or answer sheet. Violation of this entails disqualification.
3. Read each of the question carefully and shade the relevant answer (A) or (B) or (C) or (D) in the relevant box of the ANSWER SHEET using HB pencil.
4. Avoid blind guessing. A wrong answer will fetch you -1 mark and the correct answer will fetch 4 marks.
5. Do not write anything in the question paper. Use the white sheets attached at the end for rough works.
6. Do not open the question paper until the start signal is given.
7. Do not attempt to answer after stop signal is given. Any such attempt will disqualify your candidature.
8. On stop signal, keep the question paper and the answer sheet on your table and wait for the invigilator to collect them.
9. Use of Calculators, Tables, etc. are prohibited.

10. Antiulcer drug is:
 (A) Pirenzepine (B) Methylcellulose
 (C) Ciprofloxacin (D) Pyrimethamine
11. Pulmonary infiltration may be seen with all of the following drugs except:
 (A) 5 FU (B) Bleomycin
 (C) Busulphan (D) Cyclophosphamide
12. SLE like syndrome is most commonly associated with administration of:
 (A) Rifampicin (B) Procainamide (C) Digitalis (D) Phenytoin
13. All of the following are true about competitive inhibitor except
 (A) Resembles chemically with the agonist
 (B) Bind the same receptors
 (C) Reduces potency
 (D) Maximum level is not reached by increasing the concentration of the drug
14. On higher doses zero order kinetics is seen:
 (A) Phenytoin (B) Propranolol (C) Lithium (D) Probenacid
15. Gynocostamia may be caused by all except:
 (A) Cimetidine (B) Ranitidine
 (C) Ketoconazole (D) Spironolactone
16. Hyperglycemia may be caused by all except:
 (A) Nemulside (B) Chlorthiazides
 (C) Corticosteroids (D) Theophylline
17. All are classified as reversible anticholine sterases except
 (A) Ambenonium (B) Physostigmine
 (C) Pyridostigmine (D) Echothiophate
18. Agent used as a diagnostic test for myastheniagravis is:
 (A) Phentolamine (B) Edrophonium (C) Echothiophate (D) Glucagon
19. In treatment of cardiac failure, dobutamine acts by all of the following mechanisms except:
 (A) α receptors agonism (B) β adrenergic receptors agonism
 (C) Dopamine receptor agonism (D) Increasing force of contraction

20. Which of the following antiarrhythmics drugs causes prolonged repolarization of ventricles & ERP:
 (A) Amiodarone (B) Propranolol (C) Verapamil (D) Quinidine
21. Mesna is given with cyclophosphamide to:
 (A) Increase absorption (B) Decrease excretion
 (C) Amolierate haemorrhagic cystitis (D) Decrease metabolism
22. Neostigmine is a:
 (A) Primary ammonium compound (B) Secondary ammonium compound
 (C) Tertiary ammonium compound (D) Quartenary ammonium compound
23. Drug of choice in Acute central anticholinergic syndrome is
 (A) Neostigmine (B) Physostigmine
 (C) Tacrine (D) 4-amino pyridine
24. Selective α_1 -A blocker is:
 (A) Prazosin (B) Terazosin (C) Tamsulosin (D) Indoramine
25. β_1 selective agonist is:
 (A) Terbutaline (B) Albuterol (C) Dobutamine (D) Isoetharine
26. All of the following are selective β_1 blockers except:
 (A) Atenolol (B) Metoprolol (C) Labetalol (D) Betaxolol
27. Selegiline is a selective inhibitor of:
 (A) MAO-A (B) MAO-B
 (C) Dopamine (D) Norepinephrine-uptake
28. 'Vigabatrin' a new antiepileptic agent acts by:
 (A) GABA-antagonism (B) GABA-Agonism
 (C) NMDA-antagonism (D) Carbonic anhydrase inhibition
29. Quinidine is a:
 (A) Na^+ channel-blocker (B) K^+ channel blocker
 (C) Ca^{++} channel blocker (D) Cl -channel blocker
30. All of the following statements are true about nitrates except:
 (A) It releases NO (B) It causes vasodilatation
 (C) It decreases A.V. conduction (D) It has high first pass metabolism

31. β blocker with peripheral vasodilator action is:
 (A) Carvedilol (B) Propranolol (C) Atenolol (D) Acebutalol
32. Diagnosis of Myasthenia Gravis is by using:
 (A) Edrophonium (B) Neostigmine
 (C) Succinylcholine (SCh) (D) Atropine
33. Coronary steal phenomenon is caused by;
 (A) Dipyridamole (B) Diltiazem (C) Propranolol (D) Verapamil
34. The Nitrate which does not undergo first pass metabolism
 (A) Isosorbide mononitrate (B) Nitroglycerine
 (C) Pentaerythritol tetranitrate (D) Isosorbide dinitrate
35. Enalapril is contraindicated in all of the following except:
 (A) Diabetic nephropathy with albumunuria
 (B) Single kidney
 (C) Bilateral renal artery stenosis
 (D) Hyperkalamia
36. A 6yr old child presents with malignant hypertension the Drug of choice is:
 (A) Na Nitroprusside (B) Sublingual Nifedipine
 (C) Frusemide (D) Enalapril
37. Which of the following is not given in a patient with pheochromocytoma:
 (A) Atenolol (B) Prazosin (C) Nitroprusside (D) Metyrosine
38. Drug causing Hirsuitism and Gynaecomastia:
 (A) Spironolactone (B) Rifampicin (C) Penicillin (D) Bumetanide
39. Spironolactone is contraindicated with of the following
 (A) Enalapril (B) Atenelol
 (C) Verapamil (D) None of the above
40. Which one of the following drug causes increased concentration of Na^+ and Cl^- in urine with normal bicarbonate:
 (A) Ethacrynic acid (B) Frusemide (C) Acetazolamide (D) Bumetanide

41. All are reasons for reducing drug dosage in elderly except
- (A) They are lean and their body mass is less
 - (B) Have decreasing renal function with age
 - (C) Have increased baroreceptor sensitivity
 - (D) Body water is decreased
42. True statement regarding inverse agonists is:
- (A) Binds to receptor and causes intended action
 - (B) Binds to receptor and causes opposite action
 - (C) Binds to receptor and causes no action
 - (D) Binds to receptor and causes submaximal action
43. True statement regarding first order kinetics is:
- (A) Independent of plasma concentration
 - (B) A constant proportion of plasma concentration is eliminated
 - (C) $T_{1/2}$ increases with dose
 - (D) Clearance decreases with dose
44. A diabetic female on INH and rifampicin for TB suffers DVT; She is started on warfarin; PT is not raised; next step should be:
- (A) Long term heparin therapy
 - (B) Replace warfarin with acenocoumarin
 - (C) Switch ethambutol for rifampin
 - (D) Use LMW heparin
45. Beta blocker that can be used in renal failure is all except
- (A) Propranolol
 - (B) Pindolol
 - (C) Sotalol
 - (D) Oxyprenolol
46. All of the following are correct about steroids except
- (A) Inhibit the release of arachidonic acid from vessel wall through action of phospholipase A₂
 - (B) Bind plasma membrane receptors and following internalization influence nuclear changes
 - (C) Inhibit vascular membrane permeability
 - (D) Increase glucose synthesis, glycogen deposition in liver

47. All of the following statements are true except:
- (A) PG's and leukotrienes are derived from arachidonic acid
 - (B) Cox I is an inducible enzyme
 - (C) Cox II is induced by cytokines at site of inflammation
 - (D) Leukotrienes cause smooth ms. Constriction
48. Digoxin is not indicated in:
- (A) A trial flutter
 - (B) A trial fibrillation
 - (C) High output failure
 - (D) PSVT
49. All of the following statements are true about theophylline except:
- (A) Increase in dose is required in cardiopulmonary disease
 - (B) Increases cAMP
 - (C) Increase in dose is required in smokers
 - (D) Inhibits phosphodiesterase
50. Mechanism of action of tetracycline is:
- (A) Binds to A site and inhibit attachment of t-RNA
 - (B) Inhibits peptidyl transferase
 - (C) Causes misreading of mRNA
 - (D) Causes termination of peptide chain elongation
51. All of the following drugs may be used for motion sickness except:
- (A) Hyoscine
 - (B) Dicyclomine
 - (C) Domperidone
 - (D) Scopolamine
52. Shortest acting neuromuscular blocking agent is
- (A) Pancuronium
 - (B) Atracurium
 - (C) Mivacurium
 - (D) Vecuronium
53. Intracranial pressure may be increased by all of the following drugs except:
- (A) Hypervitaminosis A
 - (B) Corticosteroids
 - (C) Quinolones
 - (D) Aminoglycosides
54. Which of the following antiepileptic drugs acts by the release of the inhibiting transmitter GABA:
- (A) Valproic acid
 - (B) Diazepam
 - (C) Ethambutol
 - (D) Phenytoin
55. Furesemide and thiazides have similar properties in the following:
- (A) Duration of action
 - (B) Site of action
 - (C) Effect on urate excretion
 - (D) Well absorbed orally

56. All of the following statements about antiangial action of nitrates are true except:
- (A) ↓Myocardial O₂ consumption
 - (B) ↓Both pre and after load
 - (C) ↑Total coronary flow
 - (D) Cause favourable redistribution of coronary flow
57. Drug of choice in PSVT is:
- (A) Verapamil (B) Propranolol (C) D.C. shock (D) Digoxin
58. Predominant arteriolar dilators include all of the following except:
- (A) Sodium Nitroprusside (B) Diazoxide
 - (C) Hydrallazine (D) Minoxidil
59. Which of the following antihypertensive drugs is devoid of any central action:
- (A) Clonidine (B) α methyl dopa (C) Propranolol (D) Indapamide
60. Interstitial nephritis is most commonly seen with;
- (A) Methicilline (B) Ampicilline (C) Amoxycilline (D) Cloxacilline
61. All of the following are side effects of Amiodarone except
- (A) Pulmonary fibrosis (B) Corneal microdeposits
 - (C) Thyroid dysfunction (D) Osteoporosis
62. Which of the following statements regarding adenosine is not true:
- (A) Used in PSVT
 - (B) Administered as rapid I.V. infusion
 - (C) Has short lived side effects
 - (D) Disopyramidase increases its therapeutic effect
63. Most commonly postural hypotension is seen with
- (A) Prazosin (B) Nifedipine
 - (C) Atenolol (D) ACE inhibitors
64. Which of the following drug acts as a HMG-CoA reductase inhibitor
- (A) Gemfibrozil (B) Clofibrate (C) Lovastatin (D) Probucol
65. Low molecular weight heparin therapy is associated with all except
- (A) Less chance of bleeding
 - (B) Single dose per day
 - (C) Easy filterability by glomerular capillaries
 - (D) High biological interaction to plasma proteins

66. Which of the following has least glucocorticoid activity
 (A) Fludrocortisone (B) Dexamethasone
 (C) Triamcinolone (D) Betamethasone
67. Flumazenil is a
 (A) Benzodiazepine antagonist (B) Benzodiazepine agonist
 (C) Adrenergic blocking agent (D) Oplate antagonist
68. The most common side effect associated with chronic use of phenothiazines is
 (A) Akathisia (B) Parkinsonism
 (C) Tardive dyskinesia (D) Muscular dystonia
69. All of the following may be seen with Neuroleptic malignant syndrome except
 (A) Hypothermia (B) Altered consciousness
 (C) Muscle rigidity (D) Involuntary movements
70. Tetrahydrocannabinol is the active component of
 (A) Marijuana (B) LSD (C) Hashish (D) Heroin
71. Dipyridamol acts by
 (A) Adenosine uptake inhibition (B) Inhibiting thromboxane A₂
 (C) Stimulating PGI₂ synthesis (D) Inhibiting PGI₂ synthesis
72. All of the following are examples of bactericidal drugs except
 (A) INH (B) Rifampicin
 (C) Ethambutol (D) Pyrazinamide
73. All of the following are drugs for ATT except
 (A) Kanamycin (B) Cycloserine (C) 5-flucytosine (D) Ofloxacin
74. Mechanism of action of erythromycin is interference with
 (A) Transcription (B) Translation
 (C) Translocation (D) Signal transduction
75. Which of the following drugs acts on 'motilin' receptors
 (A) Erythromycin (B) Tetracycline
 (C) Norfloxacin (D) Chloramphenicol

76. All of the statements are true about FLUORO QUINOLONES, except
 (A) Suspected of having teratogenic potential
 (B) Arthropathy of limb-in children may occur
 (C) Increase theophylline toxicity
 (D) Increase neuromuscular blocking action
77. Cyclosporin acts by inhibiting the proliferation of
 (A) IL1 (B) IL2 (C) IL6 (D) Macrophages
78. Side-effects of the cis-platinum include all of the following except
 (A) Nausea and vomiting (B) Nephrotoxicity
 (C) Blindness (D) Ototoxicity
79. Milk-Alkali syndrome may be caused by ingestion of
 (A) Calcium-carbonate (B) Magnesium sulphate
 (C) Aluminium trisilicate (D) Aluminium hydroxide
80. Pancreatitis is a known side effect with administration of
 (A) L-Asparaginase (B) Corticosteroid
 (C) Cyclophosphamide (D) Vincristine
81. A patient is taking 40 mg Famotidine OD, Sucralfate and Antacid tablests TDS, this treatment is irrational because of
 (A) Sucralfate decreases the absorption of famotidine
 (B) Sucralfate increases the toxicity of famotidine
 (C) Suralfate decreases absorption of antacids
 (D) Suralfacte polymerises only when gastric pH is less than 4
82. A patient has Hepatic Encephalopathy. The drug used for gut sterilization in this patient is
 (A) Neomycin (B) Netilmycin
 (C) Bleomycin (D) None of the above
83. A patient taking Ketoconazole & Terfenadine both, is prone for
 (A) Cardiac arrhythmia (B) Toxicity of ketoconazole
 (C) Congestive cardiac failure (D) All of the above
84. Drug of choice for Epilepsy in pregnancy is
 (A) Carbamazepine (B) Sodium valproate
 (C) Phenobarbitone (D) Phenytoin

85. A patient of parkinsonism is managed with L-dopa. If Vit. B-complex is administered concurrently:
- (A) The action of L-dopa in brain will be potentiated
 - (B) Decarboxylation of L-dopa in brain will be decreased
 - (C) Side effects will be ameliorated
 - (D) Decreased efficacy will result
86. The treatment of contacts of meningococcal meningitis is by:
- (A) Rifampicin
 - (B) Erythromycin
 - (C) Penicillin
 - (D) Cephalosporins
87. Drug of choice for Malaria during pregnancy is:
- (A) Chloroquine
 - (B) Quinine
 - (C) Primaquine
 - (D) Mepaquine
88. Which of the following is not an anti-pseudomonal agent?
- (A) Vancomycine
 - (B) Ticarcillin
 - (C) Ceftazidime
 - (D) Tobramycin
89. Which anti HIV drug does not cause peripheral neuropathy
- (A) Lamivudine
 - (B) Stavudine
 - (C) Didanosine
 - (D) Zalcitabine
90. A 35 year old patient has Ca lung, with a past history of lung disease. Which drug should not be given.
- (A) Bleomycin
 - (B) Vinblastin
 - (C) Mithramycin
 - (D) Adriamycin
91. False statement about selegeline is
- (A) It is a MAO-A inhibitor
 - (B) Does not cause cheese reaction
 - (C) May be used in on-off phenomenon
 - (D) It is used in parkinsonism
92. A patient on phenytoin for tt of seizures develops depression for which he is prescribed tricyclies. He now complains of lassitude and his Hb reads 8:next step in managing this patient should be:
- (A) Chest X-ray
 - (B) MCV should be estimated
 - (C) GGT should be estimated
 - (D) None of the above
93. Which of the following drugs would be removed by dialysis?
- (A) Digoxin
 - (B) Salicylates
 - (C) Benzodiazepines
 - (D) Organophosphates
94. In low doeses aspirin acts on:
- (A) Cyclo-oxygenase
 - (B) Thromboxane A2
 - (C) PGI2
 - (D) Lipoxygenase

95. All of the following statements about ticlodipine are true except
- (A) Directly interacts with platelet membrane, gpIIb/IIIa receptors
 - (B) Onset of action is delayed
 - (C) Duration of action is long
 - (D) It is used as an alternative to aspirin in patients with cerebrovascular disease.
96. All of the following statements about Methotrexate are true except:
- (A) Folinic acid enhances the action of methotrexate
 - (B) Methotrexate inhibit dehydrofolate reductase
 - (C) Non proliferative cells are resistant to methotrexate
 - (D) Methotrexate is used in treatment of psoriasis
97. Drug containing two sulfhydryl groups in a molecule:
- (A) BAL
 - (B) EDTA
 - (C) Pencillamine
 - (D) None of the above
98. All are pharmacogenetic conditions, except;
- (A) Adenosine deaminase deficiency
 - (B) Malignant hyper-pyrexia
 - (C) Coumarin insensitivity
 - (D) G6PD deficiency
99. Which of the following is true?
- (A) As the concentration of a drug increases over the therapeutic range, the bound form of the drug increases.
 - (B) The bound form is not available for metabolism but is available for excretion
 - (C) Acidic drug binds to albumin; and basic drug binds zeta globulin
 - (D) Binding sites are non-specific and one drug can displace the other
100. True about teratogenicity of a drug is all except:
- (A) It is genetically predetermined
 - (B) Environment influence sit
 - (C) Related to the dose of the teratogenic drug
 - (D) Affects specifically at a particular phase of development of fetus