Paper Code: 17
SUBJECT: Pharmacology

Paper Seal / Polythene bag. Candidate himself shall be responsible for any error.

INSTRUCTIONS FOR CANDIDATES

1. Answer all questions.
2. All questions carry equal marks.
3. Only one answer is to be given for each question.
4. If more than one answers are marked, it would be treated as wrong answer.
5. Each question has four alternative responses marked serially as 1, 2, 3, 4. You have to darken only one circle or bubble indicating the correct answer on the Answer Sheet using BLUE BALL PEN.
6. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars carefully with blue ball point pen only.
7. 1/3 part of the mark(s) of each question will be deducted for each wrong answer. A wrong answer means an incorrect answer or more than one answers for any question. Leaving all the relevant circles or bubbles of any question blank will not be considered as wrong answer.
8. Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt as per rules.
9. Please correctly fill your Roll Number in O.M.R. Sheet. 5 Marks can be deducted for filling wrong or incomplete Roll Number.

Warning: If a candidate is found copying or if any unauthorized material is found in his/her possession, F.I.R. would be lodged against him/her in the Police Station and he/she would liable to be prosecuted. Department may also debar him/her permanently from all future examinations.

Do not open this Test Booklet until you are asked to do so.
1. Which one is alpha 2 selective adrenergic blocking drug?
   (1) Prazocin
   (2) Yohimbine
   (3) Phentolamine
   (4) Terazocin

2. Which of the following anaesthetic agent causing pain on intravenous administration is?
   (1) Diazepam
   (2) Ketamine
   (3) Propofol
   (4) Midazolam

3. Neostigmine is not able to cross blood brain barrier because of its
   (1) Primary structure
   (2) Secondary structure
   (3) Tertiary structure
   (4) Quartermary structure

4. Renal dose of dopamine is
   (1) 25 ug / kg / min
   (2) 5-10 pg / kg / min
   (3) 10-20 pg / kg / min
   (4) 1-2 pg / kg / min

5. Which of the drug cause iatrogenic disease?
   (1) Isonizid
   (2) Ranitidine
   (3) Omprazole
   (4) Paracetamol

6. Drug have mild anaesthetic action on cornea:
   (1) Carbamazepine
   (2) Imipramine
   (3) Atropine
   (4) Methylphenidate

7. Which of the following drugs can be given in renal failure safely?
   (1) Saxagliptin
   (2) Sitagliptin
   (3) Vildagliptin
   (4) Linagliptin

8. Thrombocytopenia causing drugs are all EXCEPT
   (1) Cephalosporin
   (2) Multivitamins containing Vitamin K
   (3) NSAIDs
   (4) Anti-depressants

9. Metformin causes a severe, sometimes life-threatening side effect of lactic acidosis. All of the following factors increase the risk of lactic acidosis EXCEPT:
   (1) Liver dysfunction
   (2) Advanced age
   (3) Smoking
   (4) Renal failure
10. Drug advertisement letter is a necessary component of each drug formulation and contains various information about the drug like drug dosing, frequency and half life. Which of the following information need not be given in the drug advertisement letter?

(1) Research papers and other articles proving efficacy of the drug
(2) Date of expiry of the drug
(3) Rare, but serious life threatening adverse effects
(4) Common, not so serious adverse effects

11. The correct sequence of systemic absorption if a drug is administered through skin is:

(1) Scrotum > forearm > scalp > postauricular skin > plantar surface
(2) Scrotum > postauricular skin > forearm > scalp > plantar surface
(3) Plantar surface > Scalp > forearm > postauricular skin > Scrotum
(4) Postauricular skin > forearm > Scrotum > Scalp > plantar surface

12. Which of these sites is least commonly preferred for Insulin injection?

(1) Anterior thigh
(2) Lateral thigh
(3) Dorsum of arm
(4) Around umbilicus

13. Which of the following statements is incorrect about rifabutin as compared to rifampicin?

(1) It has higher bioavailability and stronger activity against all mycobacterium
(2) It has a longer half-life
(3) It has lesser drug interactions
(4) It is preferred in patients with HIV

14. Which of the drug of choice for absence seizure?

(1) Valproic acid
(2) Ethosuximide
(3) Lorazepam
(4) Lacosamide

15. Pigmentation of nail is caused by all of these drugs EXCEPT:

(1) Cyclophosphamide
(2) Chlorpromazine
(3) Chloroquine
(4) Amiodarone

16. Parecoxib is prodrug of

(1) Etoricoxib
(2) Rofecoxib
(3) Valdecoxib
(4) Celecoxib
17. What is the ratio of chest compressions and breaths when a lone person is giving cardiopulmonary resuscitation?
   (1) 30:1
   (2) 30:2
   (3) 15:1
   (4) 10:1

18. Why 100% Oxygen is administered after nitrous oxide is discontinued on emergence from anesthesia?
   (1) Second gas effect
   (2) Diffusion hypoxia
   (3) For adequate analgesia
   (4) As air is costlier than oxygen

19. First Model List of Essential Drugs along with their dosage forms and strengths in
   (1) 1976
   (2) 1977
   (3) 1987
   (4) 1978

20. In what is the shapes and sizes of Adhesive patches in Transdermal therapeutic systems.
   (1) (2-8 cm2)
   (2) (25-40 cm2)
   (3) (5-20 cm2)
   (4) (1-5 cm2)

21. A relatively short hypnotic action lasting 6-8 hours is exerted by due to redistribution despite their elimination t Y2 of > 30 hr.
   (1) Barbital
   (2) Nitrazepam
   (3) Flumazenil
   (4) Zolpidem

22. Which is incorrect match
   1. Father of Modern Experimental Medicine Claude Bernard (1813-1878)
   2. Father of American Pharmacology Paul Ehrlich (1854-1915)
   3. Father of Indian Pharmacology Ram Nath Chopra (1882-1973)
   5. Father of Modern Medicine Hippocrates (460 BC-370 BC)
   6. Father of Modern Pharmacology Oswald Schmiedeberg (1838-1921)
   (1) 1,4
   (2) 2
   (3) 3
   (4) 3,1

23. IND application submission required in.
   (1) Phase I to III clinical trials
   (2) Phase 0, III clinical trials
   (3) Phase 0, I to III clinical trials
   (4) Phase 0, I to III, IV clinical trials
24. The Joint Monitoring Group and NTF have now recommended the prophylactic use of HCQ in the following categories: EXCEPT
(1) All asymptomatic healthcare workers involved in containment and treatment of COVID19 and asymptomatic healthcare workers working in non-COVID hospitals/non-COVID areas of COVID hospitals/blocks.
(2) Asymptomatic frontline workers, such as surveillance workers deployed in containment zones and paramilitary/police personnel involved in COVID-19 related activities.
(3) Asymptomatic household contacts of laboratory confirmed cases.
(4) Asymptomatic household contacts of treating healthcare worker.

25. The Joint Monitoring Group and NTF have now recommended the prophylactic use of HCQ in the following categories as Exclusion/contraindications
(1) The drug is contraindicated in persons with known cases of:
   1. Retinopathy
   2. Hypersensitivity to HCQ or 4-aminoquinoline compounds
   3. G6PD deficiency
(2) Pre-existing cardiomyopathy and cardiac rhythm disorders
(3) The drug is not recommended for prophylaxis in children under 15 years of age and in pregnancy and lactation.
(4) All of the above

26. True statement regarding HCQ use
Asymptomatic household contacts of laboratory confirmed cases
(1) 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 3 weeks; to be taken with meals
(2) 400 mg BD for 7 days
(3) 400 mg BD weekly for 7 week
(4) All of the above

27. Asymptomatic frontline workers, such as surveillance workers deployed in containment zones and paramilitary/police personnel involved in COVID-19 related activities: TRUE IS
(1) 800 mg twice a day on Day 1, followed by 400 mg once weekly for next 7 weeks; to be taken with meals
(2) 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 7 weeks; to be taken with meals
(3) 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 9 weeks; to be taken with meals
(4) All the above

28. Pharmacovigilance means
(1) Monitoring of drug safety
(2) Monitoring of unethical trade of drugs
(3) Monitoring pharma students
(4) Monitoring drug efficacy
29. Cisapride is useful in
   (1) Gastrointestinal spasm
   (2) Carcinoid syndrome
   (3) Gastrointestinal hypermotility
   (4) Gastroesophageal reflux disease

30. How many members must present for protocol approval by ethics committee
    (1) 4
    (2) 5
    (3) 6
    (4) 7

31. Ethics Committee in meeting unless how many members as detailed below are present in the meeting, namely :-
    (1) Medical scientist (preferably a pharmacologist)
    (2) Clinician; layperson
    (3) Legal expert and social scientist or representative of non-governmental voluntary agency or philosopher or ethicist or theologian or a similar person;
    (4) All of above

32. The approving Ethics Committee and the clinical trial site or the bioavailability and bioequivalence centre, as the case may be, shall be located within the same city or within a radius of
    (1) 25 kms of the clinical trial
    (2) 55 kms of the clinical trial
    (3) 50 kms of the clinical trial
    (4) 10 kms of the clinical trial

33. The Ethics Committee shall maintain data, record, registers and other documents related to the functioning and review of clinical trial or bioavailability study or bioequivalence study, as the case may be, for a period after completion of such clinical trial.
    (1) 1 year
    (2) 5 years
    (3) 6 years
    (4) 10 years

34. Nicolaus syndrome caused by which drugs
    (1) Lamivudine
    (2) Omeprazole
    (3) Diclofenac
    (4) Aspirin

35. Stevens-Johnson syndrome cause by
    (1) Diclofenac
    (2) Chloroquine
    (3) Raniitidine
    (4) Lamivudine

36. The Prevention of Cruelty to Animals Act, established in
    (1) 1965
    (2) 1947
    (3) 1960
    (4) 1969


37. The validity of IAEC is for:
   (1) 3 Years
   (2) 4 Years
   (3) 5 Years
   (4) 2 Years

38. Headquarters of CPCSEA is situated at:
   (1) Chennai
   (2) Mumbai
   (3) Delhi
   (4) Upsala

39. CPCSEA has 10 experts in Committee and how many official members?
   (1) Two
   (2) Three
   (3) Four
   (4) Five

40. In AF, pretreatment with which of the following drugs facilitates cardioversion?
   (1) Ibutilide
   (2) Beta blocker
   (3) Calcium antagonist
   (4) Digitalis

41. Which of the following newer oral anticoagulants have renal excretion?
   (1) Dabigatran
   (2) Rivaroxaban
   (3) Apixaban
   (4) All of the above

42. Which of the following is a thrombin inhibitor?
   (1) Warfarin
   (2) Dabigatran
   (3) Rivaroxaban
   (4) Apixaban

43. Which of the following drug exhibits properties consistent with multiple classes in Vaughan-Williams classification?
   (1) Quinidine
   (2) Amiodarone
   (3) Mexiletine
   (4) Propafenone

44. Which of the following antiarrhythmic drugs is used to treat painful sensory neuropathy?
   (1) Mexiletine
   (2) Flecainide
   (3) Propafenone
   (4) Amiodarone

45. Which of the following antiarrhythmic drugs have hepatic and renal clearance?
   (1) Flecainide
   (2) Atenolol
   (3) Propafenone
   (4) Amiodarone

46. Which of the following antiarrhythmic drugs can cause seizures?
   (1) Procainamide
   (2) Disopyramide
   (3) Lidocaine
   (4) Mexiletine
47. Which of the following antiarrhythmic drugs can cause taste disturbance?
   (1) Procainamide
   (2) Disopyramide
   (3) Propafenone
   (4) Sotalol

48. Which of the following antiarrhythmic drugs can cause bronchospasm?
   (1) Procainamide
   (2) Disopyramide
   (3) Propafenone
   (4) Sotalol

49. 'Holiday heart syndrome" is the term used for cardiotoxicity produced by?
   (1) Alcohol
   (2) Tobacco
   (3) Cocaine
   (4) Amphetamine

50. Cholesterol-lowering drug of choice in children is?
   (1) Statins
   (2) Ezetimibe
   (3) Cholestyramine
   (4) Lomitapide

51. Which of the following drug should not be used to treat Klebsiella infection?
   (1) Ampicillin
   (2) Amikacin
   (3) Imipenem
   (4) Tigecycline

52. Drug that inhibit translocation with combines with 50S ribosome
   (1) Doxycycline
   (2) Tetracycline
   (3) Erythromycin
   (4) Norfloxacin

53. Which of the following should be monitored if linezolid is given for more than 14 days?
   (1) Liver function tests
   (2) Kidney function test
   (3) Platelet count
   (4) Audiometry

54. All of the following drugs are bactericidal EXCEPT
   (1) Isoniazid
   (2) Tigecycline
   (3) Daptomycin
   (4) Ciprofloxacin

55. Fluoroquinolone having longest half-life is
   (1) Levofloxacin
   (2) Lomefloxacin
   (3) Ciprofloxacin
   (4) Moxifloxacin
56. Which of the following beta-lactam antibiotics be safely used in a patient with a history of allergy to penicillins?
   (1) Aztreonam
   (2) Monobactam
   (3) Azithromycin
   (4) Ceftriaxone

57. Cephalosporin that does not require dose reduction in patient with any degree of renal impairment is
   (1) Cefuroxime
   (2) Cefoperazone
   (3) Ceftazidime
   (4) Cefotaxime

58. Which of the following penicillins is effective against pseudomonas?
   (1) Piperacillin
   (2) Amoxycillin
   (3) Ampicillin
   (4) Oxacillin

59. Antimicrobial agent acting by inhibition of cell wall synthesis is
   (1) Erythromycin
   (2) Tetracycline
   (3) Lomefloxacin
   (4) Cefepime

60. A patient has hepatic encephalopathy. The drug of choice for gut sterilization in this patient is
   (1) Neomycin
   (2) Netilmicin
   (3) Bleomycin
   (4) None of the above

61. Which of the following drug causes pseudotumor cerebri?
   (1) Sparfloxacin
   (2) Tetracycline
   (3) Gentamicin
   (4) Clofazimine

62. Drug of choice for Methicillin Resistant Staphylococcus Aureus (MRSA) is
   (1) Amoxicillin-Clavulanate
   (2) Vancomycin
   (3) Fluclaxacillin
   (4) Clindamycin

63. Mechanism of action of fluoroquinolones is
   (1) Inhibits cell wall synthesis
   (2) Inhibits protein synthesis
   (3) Inhibits DNA gyrase
   (4) Interferes with intermediary metabolism
64. Antibiotic inhibiting bacterial RNA synthesis is:
   (1) Erythromycin
   (2) Rifampin
   (3) Chloramphenicol
   (4) Imipenem

65. Tick the drug belonging to antibiotics having a polyene structure:
   (1) Nystatin
   (2) Ketoconazole
   (3) Griseofulvin
   (4) All of the above

66. Streptomycin has the following unwanted effect:
   (1) Cardiotoxicity
   (2) Hepatotoxicity
   (3) Retrobulbar neuritis with red-green color blindness
   (4) Ototoxicity, nephrotoxicity

67. Most emetogenic anticancer drug is
   (1) Cisplatin
   (2) Carboplatin
   (3) High dose cyclophosphamide
   (4) High dose methotrexate

68. Cerebellar toxicity is seen with
   (1) Cisplatin
   (2) Bleomycin
   (3) Cytarabine
   (4) Actinomycin D

69. Pentostatin acts by inhibiting
   (1) RNA dependent DNA polymerase
   (2) Aldolase
   (3) Adenosine deaminase
   (4) Adenylyl cyclase

70. Hand and foot syndrome is an adverse effect of
   (1) 5-Fluorouracil
   (2) Aldolase
   (3) Etoposide
   (4) Actinomycin D

71. Hormones are:
   (1) Substance of intense biological activity
   (2) Mediators of inflammatory process
   (3) By products of tissue metabolism
   (4) Product of exocrine gland secretion

72. Drug causes acute phototoxic reaction is
   (1) Insulin
   (2) Hydrocortisone
   (3) Nalidixic acid
   (4) Demeclocycline
73. The most potent topical corticosteroid is
   (1) Hydrocortisone butyrate cream 0.1%
   (2) Betamethasone valerate cream 0.5%
   (3) Clobetasol propionate cream 0.5%
   (4) Clobetasone butyrate cream 0.5%

74. Steroids are indicated in all of the following forms of tuberculosis EXCEPT
   (1) Meningitis
   (2) Pericarditis
   (3) Ileo-Caecal tuberculosis
   (4) Adrenal Involvement

75. Finasteride acts by blocking
   (1) Receptors
   (2) 5-α reductase enzyme
   (3) Androgen receptors
   (4) β-receptors

76. All of the following preparations of insulin are rapid and short acting EXCEPT
   (1) Lispro
   (2) Aspart
   (3) Glargine
   (4) NPH

77. Which of the following is not an amino acid derivative?
   (1) Dopamine
   (2) Catecholamines
   (3) Somatostatin
   (4) Thyroid hormone

78. Which of the following hormone is "lipid-soluble"?
   (1) Steroids
   (2) Thyroid hormones
   (3) Vitamin D
   (4) All of the above

79. Peak ACTH secretion occurs at?
   (1) 4 AM
   (2) 6 AM
   (3) 8 AM
   (4) 10 AM

80. Nephrogenic DI is treated by?
   (1) Thiazide diuretic
   (2) Indomethacin
   (3) Amiloride
   (4) All of the above

81. During pregnancy, dose of levothyroxine may need to be?
   (1) Increased
   (2) Decreased
   (3) Stopped
   (4) All of the above
82. Which anti-thyroid drug is preferred in pregnancy with Graves’ disease?
   (1) Propylthiouracil
   (2) Carbimazole
   (3) Methimazole
   (4) Any of the above

83. Amiodarone contains which of the following elements?
   (1) Zinc
   (2) Iodine
   (3) Calcium
   (4) Iron

84. Liddle’s syndrome patients are very sensitive to which of the following treatment?
   (1) Amiloride
   (2) Dexamethasone
   (3) Fludrocortisone,
   (4) Eplerenone

85. Principal drug for the treatment of Adreno Cortical Carcinoma (ACC) is?
   (1) Mitotane
   (2) Ketoconazole
   (3) Mifepristone
   (4) Metyrapone

86. In patient of head injuries with rapidly increasing intracranial tension without haematoma, the drug of choice for initial management would be:
   (1) Lasix
   (2) Steroids
   (3) 20% Mannitol
   (4) Glycine

87. Drug causing gynecomastia is:
   (1) Spironolactone
   (2) Rifampicin
   (3) Penicillin
   (4) Bumetanide

88. Most common cause of Moebius syndrome is use of which of the following drug in pregnancy?
   (1) Misoprostol
   (2) Thalidomide
   (3) Methotrexate
   (4) Dinoprostone

89. Aspirin should be used with caution in the following groups of patients because of which of the following reason:
   (1) In diabetics because it can cause hyperglycemia
   (2) In children with viral disease, because of the risk of acute renal failure
   (3) In gout, because it can increase serum uric acid
   (4) In pregnancy, because of high risk of teratogenicity
90. Which of the following agent is not used for treatment of erectile dysfunction?
   (1) PGE₂
   (2) Vardenafil
   (3) Phenylephrine
   (4) Alprostadil

91. A 20 yr old female weighing 55kg is admitted to the emergency department having consumed 10 g of paracetamol together with alcohol 6 hrs earlier. A serum paracetamol level is reported as 400 micrograms/ml. Which of the following is correct with respect to this?
   (1) Gastric lavage is mandatory
   (2) Administration of activated charcoal
   (3) Abnormalities of the kidney function are likely to be present
   (4) Hepatotoxicity is likely to occur

92. NSAID lacking anti-inflammatory action is
   (1) Paracetamol
   (2) Ibuprofen
   (3) Diclofenac sodium
   (4) Celecoxib

93. Most common dose limiting adverse effect of colchicine is
   (1) Sedation
   (2) Kidney damage
   (3) Diarrhoea
   (4) Muscle paralysis

94. The antidote of choice in paracetamol poisoning is
   (1) Flumazenil
   (2) Sodium bicarbonate
   (3) N-Acetylcysteine
   (4) Methylene Blue

95. Which of the following is not a bronchodilator drug?
   (1) Beta2-adrenergic agonists
   (2) Anticholinergics
   (3) Inhaled Corticosteroids (ICSs)
   (4) Theophylline

96. Which of the following LABAs is given once daily?
   (1) Salmeterol
   (2) Formoterol
   (3) Indacaterol
   (4) All of the above

97. Therapeutic plasma concentration of theophylline is?
   (1) 5-15 µg/mL
   (2) 20-40 µg/mL
   (3) 5-15 µg/mL
   (4) 20-40 µg/mL

98. Ranitidine differs from cimetidine in the following respect
   (1) It is less potent
   (2) It is shorter acting
   (3) It does not have anti-androgenic action
   (4) It produces more CNS side effects
99. The most efficacious drug for inhibiting round the clock gastric acid output is
   (1) Omeprazole
   (2) Cimetidine
   (3) Pirenzepine
   (4) Misoprostol

100. In peptic ulcer, antacids are now primarily used for
    (1) Prompt pain relief
    (2) Ulcer healing
    (3) Preventing ulcer relapse
    (4) Control of bleeding from the ulcer

101. Which of the following is a common side effect of ticagrelor?
    (1) Pruritis
    (2) Dysgeusia
    (3) Dyspnea
    (4) Diarrhoea

102. Which of the following is an inhibitor of Protease-Activated Receptor 1 (PAR-1)
    (1) Cangrelor
    (2) Rivaroxaban
    (3) Apixaban
    (4) Vorapaxar

103. What is the mean molecular weight of heparin?
    (1) 15,000
    (2) 20,000
    (3) 25,000
    (4) 30,000

104. 1 mg of protamine sulfate neutralizes how many units of heparin?
    (1) 100
    (2) 200
    (3) 300
    (4) 400

105. Which of the following is a fibrin-specific plasminogen activators?
    (1) Streptokinase
    (2) Alteplase
    (3) Anistreplase
    (4) Urokinase

106. What is the mean molecular weight of LMWH?
    (1) 4000
    (2) 5000
    (3) 6000
    (4) 7500

107. Which of the following is an anti-metabolite?
    (1) Methotrexate
    (2) Cyclosporine
    (3) Etoposide
    (4) Vinlastine
108. Treatment of choice for Kawasaki disease is
   (1) Intravenous immunoglobulin
   (2) Steroids
   (3) Azathioprine
   (4) Aspirin

109. A patient is given tacrolimus, which antibiotic should not be given to him?
   (1) Gentamicin
   (2) Cisplatin
   (3) Cyclosporine
   (4) Vancomycin

110. A 50 Year old male, Ram lal suffering from renal failure, underwent kidney transplant. He was prescribed a nucleotide derivative following the organ transplant. The nucleotide derivative of therapeutic importance in this organ transplant is
   (1) Azathioprine
   (2) 5-Fluorouracil
   (3) Cytarabine
   (4) Allopurinol

111. Most commonly used immunosuppressants are
   (1) Glucocorticoids
   (2) Cyclosporine
   (3) Tacrolimus
   (4) Methotrexate

112. BCG is used for
   (1) Treatment of tuberculosis
   (2) Treatment of superficial bladder cancer
   (3) Treatment of anthrax
   (4) All of the above

113. Etanercept used in rheumatoid arthritis act by the inhibition of
   (1) TNF alpha
   (2) TFG beta
   (3) IL-2
   (4) IL-6

114. Tacrolimus acts by inhibiting
   (1) DNA and RNA synthesis
   (2) Anti lymphocyte antibody formation
   (3) T-Cell proliferation
   (4) All of the above

115. Bevacizumab is used in
   (1) Metastatic colorectal cancer
   (2) Glaucoma
   (3) Diabetic nephropathy
   (4) Neuropathy

116. Term ‘endocrine’ was coined by?
   (1) Jameson
   (2) Smith
   (3) Starling
   (4) Keith
117. Antipseudomonas penicilliis
   (1) Mezlocillin
   (2) Ampicillin
   (3) Clavulanic acid
   (4) Sulbactam

118. A patient of diabetes and hypertension comes to your clinic. As a doctor, you explain to him the risks of various complications. Which of these is the best tool to demonstrate the complications?
   (1) Pie Chart
   (2) Histogram
   (3) Scatterplot
   (4) Venn diagram

119. Which of these is the best study to evaluate effect and outcome?
   (1) Clinical trial
   (2) Cohort
   (3) Case control study
   (4) Cross sectional study

120. Some medicines come with a label of ‘store at cool place only’. What should be the temperature?
   (1) 8-15 °C
   (2) 2-8 °C
   (3) 0 °C
   (4) 25-2 °C

121. If a drug does not cure the disease but increases survival of the patient, its use would lead to:
   (1) Decreased incidence
   (2) Decreased prevalence
   (3) Increased Incidence
   (4) Increased prevalence

122. Which of these is not true about randomization in a clinical trial?
   (1) Reduces confounding
   (2) Decreases selection bias
   (3) Ensures comparability of two groups
   (4) Increases external validity of the trail

123. Most cost effective method of infection control is:
   (1) Handwashing
   (2) Alcohol based rubbing
   (3) Prophylactic antibiotic therapy
   (4) Repeated disinfectant use

124. According to the new WHO 2013 malaria treatment guidelines which of the following statements is true:
   (1) Presumptive treatment with chloroquine should be given
   (2) Primaquine is to be given for 7 days
   (3) No ACT in falciparum malaria
   (4) Primaquine is contraindicated in infants and pregnant women
125. Which of the following drugs does not affect DNA synthesis?
   (1) Rifampicin
   (2) Linezolid
   (3) Nitrofurantoin
   (4) Metronidazole

126. What does low volume of distribution of a drug mean?
   (1) Low bioavailability
   (2) Does not accumulates in tissues
   (3) Low absorption
   (4) Not metabolized in the body

127. Which of the following drugs is not used in treatment of bird flu?
   (1) Oseltamivir
   (2) Ribavirin
   (3) Zanamivir
   (4) Peramivir

128. What are the appropriate instructions to be given while prescribing bisphosphonates to a patient?
   (1) To be given empty stomach with a glass of water
   (2) Taken along with food
   (3) Stop if features of gastritis develop
   (4) Stop if bone pains occur

129. Which one of the following is a gender specific side effect of valproate?
   (1) Polycystic ovarian syndrome
   (2) Alopecia
   (3) Weight loss
   (4) Tremor

130. Which of the following drugs is not used in detoxification of chronic alcoholic?
   (1) Flumazenil
   (2) Disulfiram
   (3) Acamprosate
   (4) Naltrexone

131. Drugs prescribed by registered medical practitioners mostly fall under which class of drugs?
   (1) Schedule X
   (2) Schedule S
   (3) Schedule H
   (4) Schedule P

132. Which of these drugs is a calcineurin inhibitor?
   (1) Cyclosporine
   (2) Methotrexate
   (3) Azathioprine
   (4) Mycophenolate mofetil
133. Platelet aggregation is blocked by aspirin due to its action on –
   (1) Prostacyclin
   (2) PGF 2 alpha
   (3) Thromboxane A2
   (4) Phospholipase C

134. Which of these is a new oral drug used in treatment of chronic Hepatitis C.-
   (1) Interferon alpha
   (2) Ledipasvir
   (3) Oseltamivir
   (4) Lamivudine

135. The reason behind post dural puncture headache is ?
   (1) Adverse effects of drugs
   (2) Injury to nerve roots
   (3) Fine needle
   (4) Seepage of CSF

136. Which of these is most commonly used as preanesthetic medication ?
   (1) Atropine
   (2) Promethazine
   (3) Scopolamine
   (4) Glycopyrrolate

137. Sample size calculator required all EXCEPT :
   (1) Population error
   (2) Confidence level
   (3) Population size
   (4) Margin of error

138. What statement is correct for Chi square test and McNemar test :-
   (1) Chi square test can be used for large tables but McNemar test is used for 2 x 2 table
   (2) Chi square test is used for only 2 x 2 tables but McNemar can be used for large tables
   (3) Both Chi square test and McNemar test are used only for large tables
   (4) Both Chi square test and McNemar test are used only for 2 x 2 table

139. A study was done in 3 states to see the mean blood pressure in each community. Health workers were assigned and they visited each house in the three communities. Mean blood pressure in each community was found and compared. What type of study design is represented here ?
   (1) Cohort study
   (2) Cross-sectional study
   (3) Case control study
   (4) Field trial
140. Preferred in animal in screening of antiemetic activity
   (1) Monkey
   (2) Cat
   (3) Chicken
   (4) Pigeon

141. What is Normal Value of Ankle Brachial Index?
   (1) 0.75-0.9
   (2) 0.5-0.75
   (3) Less then 0.5
   (4) More then 1.3

142. Which one is integrase inhibitor?
   (1) Ritonavir
   (2) Maraviroc
   (3) Raltegravir
   (4) Enfuvirtide

143. St. Anthony's fire refers to poisoning by:
   (1) Aflatoxin
   (2) Ergot alkaloids
   (3) Crotalaria juncea
   (4) Spanish fly

144. Methacholine has main agonist action at-
   (1) M2
   (2) M1
   (3) M4
   (4) M3

145. Which of the following drug cause Heterochromia iridis?
   (1) Latanoprost
   (2) Prednisolone
   (3) Timolol
   (4) Olopatadine

146. What type of inhibition of acetylcholinesterase is caused by organophosphates?
   (1) Competitive, reversible
   (2) Non-competitive, irreversible
   (3) Uncompetitive, reversible
   (4) Competitive, irreversible

147. Which of the following is a protease inhibitor?
   (1) Saquinavir
   (2) Nevirapine
   (3) Abacavir
   (4) Enfuvirtide
148. Which of the following drugs does not act by increasing insulin secretion?
(1) Exenatide
(2) Sitagliptin
(3) Rosiglitazone
(4) Repaglinide

149. Best antihypertensive drug in pulmonary hypertension?
(1) Bosentan
(2) Amlodipine
(3) Frusemide
(4) Digoxin

150. Diuretic which can be given in mild to moderate hypertension?
(1) Loop diuretic
(2) Thiazide
(3) Osmotic diuretic
(4) Potassium

151. Which of the following is the mechanism of action of Zileuton?
(1) Inhibits Lipooxygenase
(2) Inhibit production of IgE
(3) Inhibits Cyclooxygenase
(4) Inhibit mast cell activity

152. A patient with history of coronary artery disease presents with pulse rate of 48/min and BP. Patient has decreased myocardial contractility on Echo. Which of these anaesthetic agents is contraindicated?
(1) Ketamine
(2) Dexmedetomidine
(3) Etomidate
(4) Fentanyl

153. Which of the following combinations can be used for day care surgery?
(1) Remifentanyl, Midazolam, Propofol
(2) Fentanyl, Midazolam, Thiopentone Sodium
(3) Morphine, Midazolam, Propofol
(4) Morphine, Diazepam, Ketamine

154. Muscle relaxant that can be used in a patient with high S.Bilirubin of 6.0 and S.Creatinine of 4.5 mg/DI?
(1) Vecuronium
(2) Atracurium
(3) Pancuronium
(4) Mivacurium

155. Which anesthetic agent can cause pain on IV administration?
(1) Thiopentone
(2) Propofol
(3) Ketamine
(4) Midazolam
156. True about G protein coupled receptors is
   (1) G proteins bind to hormones on the cell membrane
   (2) All the three subunits alpha, beta and gamma should bind to each other for G proteins
   (3) G proteins act as inhibitory and excitatory because of difference in alpha subunit
   (4) G protein is bound to GTP in resting state

157. Therapeutic index is a measure of
   (1) Safety
   (2) Potency
   (3) Efficacy
   (4) Selectivity

158. K_m of an enzyme is:
   (1) Dissociation constant
   (2) The normal physiological substrate concentration
   (3) The substrate concentration at half maximal velocity
   (4) Numerically identical for all isozymes that catalyze a given reaction

159. A partial agonist has
   (1) High affinity but low intrinsic activity
   (2) High affinity but no intrinsic activity
   (3) Low affinity but high intrinsic activity
   (4) Low affinity and low intrinsic activity

160. Which drug show inactivation by spontaneous molecular rearrangement without the agency of any enzyme?
   (1) Aspirin
   (2) Anakinra
   (3) Atracurium
   (4) Anastrozole

161. Agonist is having
   (1) Affinity with intrinsic activity is 1
   (2) Affinity with intrinsic activity is 0
   (3) Affinity with intrinsic activity is -1
   (4) None

162. Latest National List of Essential Medicine for India was published in
   (1) 2014
   (2) 2015
   (3) 2016
   (4) 2020

163. Posology is the science of
   (1) Poisons
   (2) Identification of drugs
   (3) Medicine nomenclature
   (4) Dose determination

164. Veterinary doctors regularly prescribe injection diclofenac to animals. When those animals die, vultures who are fed on those dead bodies, develop renal failure, and die because of the presence of diclofenac in their bodies entering vultures. This phenomenon is studied under
   (1) Pharmacovigilance
   (2) Toxicology
   (3) Ecopharmacology
   (4) Pharmacoepidemiology
165. Shelf life of the drug is the time between:
   1. Administration to onset of drug action
   2. Manufacturing of the drug to dispensation of the drug
   3. Dispensing of the drug to consumption of the drug
   4. Manufacturing of the drug to the expiry date of the drug

166. Which of the following drug is used for overactive bladder?
   1. Duloxetine
   2. Darifenacin
   3. Oxybutynin
   4. Flavoxate

167. A patient presented in emergency with tachycardia, hyperthermia, bronchial dilatation and constipation. The person is likely to be suffering from overdose of:
   1. Atropine
   2. Organophosphorus compound
   3. Mushroom
   4. Paracetamol

168. A child presented with history of ingestion of some unknown plant and developed mydriasis, tachycardia, dry mouth, warm skin and delirium. Which of the following group of drugs is likely to be responsible for the symptoms of this child?
   1. Anticholinergic
   2. Sympathomimetic
   3. Opioid
   4. Benzodiazepine

169. Which of the following concentrations of epinephrine does not correspond to the respective route of administration?
   1. 1:10000 for intravenous route
   2. 1:1000 for inhalational route
   3. 1:10000 for intramuscular route
   4. 1:1000 for subcutaneous route

170. A 55 years old female comes to the eye casualty with history of severe eye pain, redness and diminution of vision. On examination, the visual acuity is 4/60, there is corneal congestion, corneal oedema and a shallow anterior chamber. Which of the following is the best drug of choice?
   1. Homatropine ointment
   2. IV. Mannitol
   3. Ofloxacin eye drops
   4. Betamethasone eye drops

171. Drug used to perform stress ECHO is:
   1. Thallium
   2. Dobutamine
   3. Noradrenaline
   4. Adenosine

172. Vasopressor of choice in pregnancy is:
   1. Ephedrine
   2. Phenylephrine
   3. Amphetamine
   4. Mephentermine
173. Fenoldopam is used in the management of
   (1) Hypertensive emergencies
   (2) Congestive heart failure
   (3) Migraine prophylaxis
   (4) Tachyarrhythmia

174. Drug of choice for mushroom poisoning is
   (1) Atropine
   (2) Physostigmine
   (3) Adrenaline
   (4) Carbachol

175. Which is not an endogenous catecholamine?
   (1) Dopamine
   (2) Dobutamine
   (3) Adrenaline
   (4) Noradrenaline

176. You are being asked to give your expert opinion as a toxicologist regarding an effective antidote for belladonna poisoning. Which of the following agents would you suggest?
   (1) Neostigmine
   (2) Physostigmine
   (3) Pilocarpine
   (4) Methacholine

177. Sympathetic Pre : Post ganglionic fiber ratio is
   (1) 1:10 to 1:100
   (2) 1:20 to 1:100
   (3) 1:20 to 1:1000
   (4) 1:10 to 1:1000

178. A child, Ramu has swallowed the contents of 2 bottles of a nasal decongestant whose primary ingredient is adrenoceptor agonist drug. The signs of activation that may occur is this patient include
   (1) Tachycardia
   (2) Dilatation of pupil
   (3) Vasodilation
   (4) All of the above

179. Which of the following drug is a third generation β-blocker?
   (1) Metoprolol
   (2) Timolol
   (3) Nadolol
   (4) Nebivolol

180. Drug of choice for treatment of acute organophosphate poisoning is
   (1) Atropine
   (2) Pralidoxime
   (3) Neostigmine
   (4) Atosiban