वरिट्ट प्रदर्शक (चिकित्स) शिक्षा किमाग) संवीक्षा परीक्षा- 2020

पुस्तिका में पृष्ठों की संख्या : 24 Number of Pages in Booklet : 24

पुस्तिका में प्रश्नों की संख्या : 180 No. of Questions in Booklet : 180

Paper Code: 09

SUBJECT: Pharmacology

समय : 3.00 घण्टे Time : 3.00 Hours प्रश्न-पत्र पुस्तिका संख्या / Question Paper Booklet No.

MSDPc-02

प्रोक्षा दिनोक - 17/09/2020

परीक्षा सम्भ - 9100 to 12100 Monathan अंक: 180 Maximum Marks: 180

प्रश्न-पत्र पुस्तिका एवं उत्तर पत्रक के पेपर सील/पॉलिथीन बैग को खोलने पर परीक्षार्थी यह सुनिश्चित कर लें कि उसके प्रश्न-पत्र पुस्तिका पर वही प्रश्न-पत्र पुस्तिका संख्या अंकित है जो उत्तर पत्रक पर अंकित है । इसमें कोई भिन्नता हो तो वीक्षक से दूसरा प्रश्न-पत्र प्राप्त कर लें । ऐसा न करने पर जिम्मेदारी अभ्यर्थी की होगी ।

The candidate should ensure that Question Paper Booklet No. of the Question Paper Booklet and Answer Sheet must be same after opening the Paper Seal / Polythene bag. In case they are different, a candidate must obtain another Question Paper. Candidate himself shall be responsible for ensuring this.

परीक्षार्थियों के लिए निर्देश

- 1. सभी प्रश्नों के उत्तर दीजिए ।
- 2. सभी प्रश्नों के अंक सनान हैं।
- प्रत्येक प्रश्न का केवल एक ही उत्तर दीजिए ।
- 4. एक से अधिक उत्तर देने की दशा में प्रश्न के उत्तर को गलत माना जाएगा ।
- 5. प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं, जिन्हें क्रमश: 1, 2, 3, 4 अंकित किया गया है । अभ्यर्थी को सही उत्तर निर्दिष्ट करते हुए उनमें से केवल एक गोले अथवा बबल को उत्तर पत्रक पर नीले वॉल प्वाइंट पेन से गहरा करना है ।
- 6. OMR उत्तर पत्रक इस परीक्षा पुस्तिका के अन्दर रखा है । जब आपको परीक्षा पुस्तिका खोलने को कहा जाए, तो उत्तर-पत्र निकाल कर ध्यान से केवल नीले बॉल पॉइंट पेन से विवरण भरें ।
- प्रत्येक गलत उत्तर के लिए प्रश्न अंक का 1/3 भाग काटा जायेगा । गलत उत्तर से तात्पर्य अशुद्ध उत्तर अथवा किसी भी प्रश्न के एक से अधिक उत्तर से हैं । किसी भी प्रश्न से संबंधित गोले या बबल को खाली छोड़ना गलत उत्तर नहीं माना जायेगा ।
- श. मोबाइल फोन अथवा इलेक्ट्रोनिक यंत्र का परीक्षा हॉल में प्रयोग पूर्णतया वर्जित है । यदि किसी अभ्यर्थी के पास ऐसी कोई वर्जित सामग्री मिलती है तो उसके विरुद्ध आयोग द्वारा नियमानुसार कार्यवाही की जायेगी ।
- कृपया अपना रोल नम्बर ओ.एम.आर. पत्रक पर सावधानीपूर्वक सही भरें । गलत अथवा अपूर्ण रोल नम्बर भरने पर 5 अंक कुल प्राप्तांकों में से काटे जा सकते हैं ।

चेतावनी: अगर कोई अभ्यर्थी नकल करते पकड़ा जाता है या उसके पास से कोई अनिधकृत सामग्री पाई जाती है, तो उस अभ्यर्थी के विरुद्ध पुलिस में प्राथमिकी दर्ज कराते हुए विविध नियमों-प्रावधानों के तहत कार्यवाही की जाएगी । साथ ही विभाग ऐसे अभ्यर्थी को भविष्य में होने वाली विभाग की समस्त परीक्षाओं से विवर्जित कर सकता है ।

INSTRUCTIONS FOR CANDIDATES

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- Answer all questions.
- 2. All questions carry equal marks.
- 3. Only one answer is to be given for each question.
- If more than one answers are marked, it would be treated as wrong answer.
- 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 POINT PEN.
- 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.
- 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.
- Please correctly fill your Roll Number in O.M.R. Sheet.
 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.

इस परीक्षा पुस्तिका को तब तक न खोलें जब तक कहा न जाए। Do not open this Test Booklet until you are asked to do so.

09-0

- 1. Anti-cholinesterases are ineffective in
 - (1) Belladonna poisoning
 - (2) Carbamate poisoning
 - (3) Post-operatic paralyticus ileus
 - (4) Cobra bite
- 2. Following statements about Beta (β) blocker are true, except
 - (1) Esmolol is rapidly metabolised in liver.
 - (2) Celiprolol has direct vasodilatory property.
 - (3) Nevibolol releases nitric oxide.
 - (4) Metoprolol used CHF to prolong survival.
- 3. True statement regarding segmental block during spinal anaesthesia
 - (1) Sympathetic block is higher than the sensory block.
 - (2) Motor block is higher than the sensory block.
 - (3) Motor block is higher than sympathetic block.
 - (4) Sympathetic, motor and sensory block has the same level.
- Following are the centrally acting skeletal muscle relaxants, except
 - (1) Chlozoxazone
 - (2) Chlormezanone
 - (3) Chlorpropamide
 - (4) Thiocolchicoside

- 5. Shortest acting non-depolarizing muscle relaxant is
 - (1) Succinyl choline
 - (2) Mivacurium
 - (3) Cis-Atracurium
 - (4) Atracuronium
- 6. Which of the following statement is correct regarding the drug interaction with Non-depolarizing Neuromuscular Blockers (NMBs)?
 - (1) Desflurane reduce effect of NMBs.
 - (2) Cholinesterase inhibitors increase effect of NMBs.
 - (3) Aminoglycosides increase the effect of NMBs.
 - (4) CCB reduces the effect of NMBs.
- True statement about Lignocaine except
 - (1) Used for treatment of Ventricular arrhythmia
 - (2) Can precipitate malignant hyperthermia
 - (3) Lignocaine is more cardiotoxic than Bupivacaine
 - (4) Bupivacaine is more vasodilatory than Lignocaine

- 8. Which of the following statement about NSAIDS is false?
 - (1) They can blunt the antihypertensive effect of ACEI.
 - (2) NSAIDS are useful in diabetic neuropathy pain.
 - (3) NSAIDS may cause nephrotoxicity.
 - (4) Many NSAIDS can be used topically.
- 9. Which of the following statement is not true about Aspirin?
 - Its clearance is dependent on plasma concentration.
 - (2) It is an irreversible inhibitor of COX enzyme.
 - (3) It is associated with ion trapping in stomach.
 - (4) It have a very low adverse effect on gastric mucosa.
- 10. A drug that is effective for rheumatoid arthritis but is not appropriate for Osteoarthritis is
 - (1) Naproxen
 - (2) Keterolac
 - (3) Parecoxib
 - (4) Leflunomide

- 11. Following statements about Fexofenadine are true, except
 - (1) It undergoes very low first pass metabolism.
 - (2) Terfenadine is active metabolites of this drugs.
 - (3) It does not block cardiac K⁺ channels.
 - (4) It has low affinity for central H₁ receptor.
- **12.** Mechanism of action of colchicine in acute Gout is
 - Suppression of pain transmission at spinal level.
 - (2) Metaphase arrest in neutrophil proliferation.
 - (3) Prevention of Granulocyte migration
 - (4) Inhibition of uric acid crystal formation in joint
- All of the following actions of histamine arc mediated through H₁ receptor, except
 - Release of NO from vascular endothelium lead to vasodilation
 - (2) Direct action on vascular smooth muscle resulting in vasodilation in smaller artery
 - (3) Bronchoconstriction
 - (4) Release of Adrenaline from adrenal medulla

- All of the following can be used for prophylaxis of migraine
 - (1) Zolmitriptan
 - (2) Topiromate
 - (3) Amitriptyline
 - (4) Propranolol
- Following statements are true about H₁ antihistaminics, EXCEPT
 - (1) Ebastine is an active metabolite of Azelestine
 - (2) Azelestine can be used topically.
 - (3) Promethazine is used for acute muscle dystonia cause by antipsychotic drugs
 - (4) Cyproheptadine have additional SHT₂ blocking activity
 - 16. Which of the following is useful in acute attack of Gout?
 - (1) Probenecid
 - (2) Sulfinpyrazole
 - (3) Allopurinol
 - (4) Piroxicam
 - 17. Allopurinol potentiates the action of
 - (1) Corticosteroid
 - (2) Probenecid
 - (3) 6-mercaptopurine
 - (4) Amphicillin

- **18.** Which of the following drugs act as a benzodiazepine antagonist?
 - (1) Flumazenil
 - (2) Fomepizol
 - (3) Furazolidine
 - (4) Fluoxetine
 - 19. Selective COMT (Catechol-O-Methyl Transferase) inhibitor used in Parkinson disease is
 - (1) Entacapone
 - (2) Ropinirole
 - (3) Pergolide
 - (4) Pramipixole
 - 20. Drug of choice in drug induced Parkinsonism is
 - (1) Levodopa
 - (2) Benzhexol
 - (3) Amantadine
 - (4) Carbidopa
 - 21. Following statements about Dexmedetomidine are correct, EXCEPT
 - (1) It is an α2 (Alpha 2) agonist
 - (2) Used for sedating property in ICU.
 - (3) It can cause hypertension and Tachycardia
 - (4) It is used for analgesic property in ICU.

- 22. Anticonvulsant causing visual field contraction is
 - (1) Vigabatrin
 - (2) Levetiracetam
 - (3) Ethosuximide
 - (4) Phenytoin
- **23.** Which one of the following is an established clinical use of morphine?
 - (1) Generalized Anxiety disorder
 - (2) Relief of pain associated with biliary colic
 - (3) Pulmonary congestion in acute left ventricular failure
 - (4) Alcohol withdrawal syndrome
- 24. Following statements about Tricyclic Antidepressants (TCA) are true, except:
 - (1) TCA should not be used in patient of Glaucoma
 - (2) Used for prophylaxis of Migraine
 - Are useful in diabetic neuropathic . pain
 - (4) Useful in erectile dysfunction
- 25. All are true about Ramelteon, except
 - Act on MT₁ and MT₂ receptor as agonist
 - (2) It only induce sleep and does not prolong sleep
 - (3) It has very high first pass metabolism
 - (4) No rebound insomnia

- **26.** Which one of the following statement about Lithium is true?
 - (1) It can cause mild hyperthyroidism.
 - (2) Thirst and polyurea are common side effect.
 - (3) High Na⁺ diet intake will increase the lithium level.
 - (4) It will calm the patient of acute mania within 24 hours.
- **27.** Following pairs of drugs mechanism of action are correct, except
 - (1) Gabapentin Enhances GABA release
 - (2) Tiagabine Blocking GABA transporter GAT-1 mediated removal of GABA.
 - (3) Vigabatrin Inhibitor of GABA-transaminase.
 - (4) Pregabalin Act as GABA agonist and enhance CL⁻ ion transport.
- Drug which do not act via GABA_A- Cl channel complex
 - (1) Zopiclone
 - (2) Methohexitone
 - (3) Clobazem
 - (4) Citalopram

- 29. Shortest acting benzodiazepine is
 - (1) Alprazolam
 - (2) Midazolam
 - (3) Lorazepam
 - (4) Diazepam
- Anti-Parkinsonian drug, which act by blocking Dopaminergic D₂ receptor directly
 - (1) Ropinirole
 - (2) Benserazide
 - (3) Tolcapone
 - (4) Rasagiline
- **31.** Which of the following statements is correct about Donepezil?
 - (1) It is a topical carbonic anhydrase inhibitor.
 - (2) It is a cate-chol-o-methyl transferase inhibitor.
 - (3) It is a cerebroselective anticholin esterase.
 - (4) It is a GABA transaminase inhîbitor.
- 32. All of the following are the adverse effects of carbamazepine, except:
 - (1) Teratogenicity
 - (2) Neurotoxicity
 - (3) Decrease in ADH (Anti-diuretic Hormone)
 - (4) Hypersensitivity

- 33. Which of the following is the feature of phenytoin toxicity (over dose)?
 - (1) Gum hypertrophy
 - (2) Loss of hair
 - (3) Acne Rosacea
 - (4) Nystagmus
- 34. Which of the following drug is useful for the treatment of infantile spasm?
 - (1) ACTH
 - (2) Phenobarbitone
 - (3) Carbamazepine
 - (4) TSH
- 35. All are true about clozapine, except
 - (1) It can cause agranulocytosis
 - (2) It block D2 and 5-HT2 both
 - (3) It has α adrenergic blocking property
 - (4) It has no anticholinergic property
- Congenital anomaly in fetus which can be caused by Lithium is
 - (1) Tetralogy of Fallot
 - (2) Ebstein's anomaly
 - (3) Bicuspid atresia
 - (4) Pulmonary stenosis
- 37. Following statements are incorrect about Buspirone, except
 - (1) It interact with GABA_A receptor
 - (2) It is a anxiolytic
 - (3) It produces physical dependence
 - (4) It will have rebound insomnia

- 38. Selective serotonin reuptake inhibitors (SSRIs) are useful in all except
 - (1) Social phobia
 - (2) Acute panic attack
 - (3) Post traumatic
 - (4) Generalized anxiety disorder
- **39.** Which of the following drugs is not an antipsychotic agent?
 - (1) Trazodone
 - (2) Risperidone
 - (3) Quetiapine
 - (4) Ziprasidone
- **40.** All the drugs can be used in treatment of Heroin dependence except
 - (1) Buprenorphine
 - (2) Fomepizole
 - (3) Clonidine
 - (4) Lofexidine
- 41. Weight gain caused by antipsychotic is due to antagonism of which serotonin receptor?
 - (1) SHT₄
 - (2) SHT_{2A}
 - (3) SHT_{2B}
 - (4) SHT_{2C}

- **42.** Which of the following drug does not effect GABA_A gated chloride channel?
 - (1) Alcohol
 - (2) Muscimol
 - (3) Picrotoxin
 - (4) Buspirone
- 43. Drug which can be used to treat mania in ICU (emergency) are all except
 - (1) Carbamazepine
 - (2) Lithium
 - (3) Diazepam
 - (4) Lorazepam
- **44.** The plane of surgical anaesthesia during ether anaesthesia is defined as
 - (1) Loss of consciousness
 - (2) Loss of consciousness to the onset of spontaneous respiration
 - (3) From onset of regular respiration to cessation of spontaneous breathing
 - (4) Abscense of reflexes
- **45.** Following are the advantages of Glycopyrrolate over Atropine during pre-anesthetic medication
 - (1) Less CNS action
 - (2) Less Tachycardia
 - (3) Longer acting
 - (4) Less neuromuscular blockade

- 46. Which of the following is indicated for treatment of amyotrophic lateral sclerosis?
 - (1) Pramipexole
 - (2) Riluzole
 - (3) Galantamine
 - (4) Glitiramer
- 47. All of the following drugs controlled substances with a risk for drug dependence except:
 - (1) Armodafinil
 - (2) Methamphetamine
 - (3) Atomoxetine
 - (4) Dexmethylphenidate
- 48. Lamotrigine has very common side effect of
 - (1) Rash
 - (2) Irritability
 - (3) Nephrotoxicity
 - (4) Behavioral disturbances
- 49. Which of the following inhalational anaesthetic agent causes maximum respiratory irritation?
 - (1) Enflurane
 - (2) Halothane
 - (3) Sevoflurane
 - (4) Desflurane

- 50. Drug used for smoking cessation is
 - (1) Acamprosate
 - (2) Naloxone
 - (3) Carbamazepine
 - (4) Varenicilline
- 51. Which statement is TRUE about carbamazepine?
 - Carbamazepine is an enzyme inhibitor
 - (2) Used in trigeminal neuralgia
 - (3) Can cause megaloblastic anaemia
 - (4) It is a drug of choice for status epilepticus
- 52. All the following drugs require dose reduction in "Cirrhosis of Liver" except
 - (1) Lorazepam
 - (2) Diazepam
 - (3) Phenytoin
 - (4) Rifampin
- 53. Lysergic acid diethylamide (LSD) act as agonist on which receptor?
 - (1) CB₁ and CB₂ receptors
 - (2) SHT receptor
 - (3) NDMA receptor
 - (4) Dopamine receptor

- 54. Tianeptine act as antidepressant by which mechanism of action?
 - (1) Inhibit 5-HT reuptake
 - (2) Inhibit 5-HT and NA reuptake
 - (3) Increase reuptake of 5-HT
 - (4) Inhibit DA and 5-HT reuptake
- 55. Following statements are true regarding Antidepressant drugs except
 - (1) Citalopram is a SSRIs
 - (2) Mianserin is a Atypical antidepressants
 - (3) Bupropion inhibit reuptake of DA only
 - (4) Clomipramine is useful in premature ejaculation
- **56.** Valbenazine is approved for the use for "Adverse drugs effect" of Antipsychotic drugs is
 - (1) Malignant neuroleptic syndrome
 - (2) Acute muscular dystonias
 - (3) Akathisia
 - (4) Tardive dyskinesia
- All are true regarding METHANOL poisoning except
 - (1) Hemodialysis should be done when serum methanol concentration is above 50 mg/dl.
 - (2) Fomepizole act by inhibiting aldehyde dehydrogenase.
 - (3) Metabolic acidosis will be there in severe cases.
 - (4) Visual disturbances are commonly seen.

- **58.** Which of the following is not used for alcohol withdrawal?
 - (1) Disulfiram
 - (2) Flumazenil
 - (3) Acamprosate
 - (4) Naltrexone
- 59. Angel dust is
 - (1) Phenyl butazone
 - (2) Dimethoxy methyle amphetamine
 - (3) Phencyclidine
 - (4) Methylphenidate
- **60.** Which of the following action of morphine develop little or no tolerance?
 - (1) Analgesic
 - (2) Miosis
 - (3) Euphoria
 - (4) Nausea and Vomiting
- **61.** Physiological antagonism is found in all except
 - (1) Prostacycline Thromboxane
 - (2) Heparin Protamine
 - (3) Adrenaline Histamine
 - (4) Salbutamol Leukotrienes
- 62. Ligand gates ions channels is
 - (1) VIP receptor
 - (2) Somatostatus receptor
 - (3) GABA_B receptor
 - (4) GABA_A receptor

- 63. Which of the following is not an adverse effect of salbutamol?
 - (1) Tachycardia
 - (2) Tolerance
 - (3) Hypokalemia
 - (4) Hypoglycemia
- **64.** All of the following drugs increases the level of theophylline except
 - (1) Ciprofloxacin
 - (2) Barbiturates
 - (3) Cimetidine
 - (4) Allopurinol
- 65. All of the following statements about spironolactone are true except
 - It is used in combination with Furosemide to decrease the chances of hyperkalemia
 - (2) It helps to overcome the refractoriness of thiazides
 - (3) It is more useful in cirrhotic and nephrotic edema
 - (4) It should not be given with K⁺ supplement.
- **66.** Following are the adverse effects of Furosemide except
 - (1) Hyperuricemia
 - (2) Hypocalcemia
 - (3) Hypoglycaemia

(4) Hypomagnesemia

- 67. Which of the following statement is not true about diuretics?
 - Thiazides act on cortical diluting segment of nephron.
 - Acetazolamide is carbonic anhydrase inhibitors.
 - (3) Furosemide act on descending limb of loop of Henle.
 - (4) Spironolactone is an aldosterone antagonist.
- All the following drugs reduce after load EXCEPT
 - (1) Lisinopril
 - (2) Propranolol
 - (3) Hydralazine
 - (4) GTN Glyceryle trinitrate
- 69. Digoxin toxicity can be increased by all except
 - (1) Hypokalemia
 - (2) Hypomagnesemia
 - (3) Hypercalcemia
 - (4) Hyperuricemia
- **70.** Which of the following drug may cause decrease libido and impotence?
 - (1) Captopril
 - (2) Prazocin
 - (3) Metoprolol
 - (4) Diltiazem

- 71. Best management for an elderly hypertensive patient who is also suffering from diabetus mellitus and bilateral renal artery stenosis
 - (I) Enalepril
 - (2) Amlodipine
 - (3) Propranolol
 - (4) Thiaziades
- 72. Nitroglycerine can be administered by all of the following routes except:
 - (1) Oral
 - (2) Sublingual
 - (3) Intramuscular
 - (4) Intravenous
- 73. All are the toxicities seen with Amiodarone therapy except
 - (1) Pulmonary fibrosis
 - (2) Corneal microdeposites
 - (3) Cirrhosis of liver
 - (4) Productive cough
- 74. All of the following statements are true about Quinidine except
 - (1) It block myocardial Na+ channels.
 - (2) It has no effect on myocardial K⁺ channels.
 - (3) It increases P-R and Q-T intervals on ECG.
 - (4) It can cause Digoxin toxicity due to displacement of tissue binding.

- 75. The drug of choice for rapid correction of PSVT in known Asthmatics is
 - (1) Adenosine
 - (2) Propranolol
 - (3) Neostigmine
 - (4) Verapamil
- 76. Lidocaine is an effective antiarrhythmic because it
 - (1) Suppresses excitability in hypoxic areas of the heart
 - (2) Prolong the Q-T interval
 - (3) Prolong the P-R interval
 - (4) Depresses the slope of phase 0 (zero) in slow response tissues
- 77. All of the following drugs can cause gynaecomastia except
 - (1) Digoxin
 - (2) Amiloride
 - (3) Cimetidine
 - (4) Spironolactone
- 78. Potassium channel opener with anti-anginal activity is
 - (1) Nicorandil
 - (2) Dipyridamole
 - (3) Trimetazidine
 - (4) Oxyphedrine
- Organic Nitrates produces therapeutic effect in Angina by all mechanism except
 - (1) Preload Reduction
 - (2) Afterload reduction
 - (3) Decrease Heart Rate
 - (4) Redistribution of coronary artery blood flow

- 80. Calcium channel blocker which can cause increase in Heart Rate is
 - (1) Nifedipine
 - (2) Amlodipine
 - (3) Verapamil
 - (4) Ditiazem
- All the following ACEI (Angiotensin Converting Enzyme Inhibitors) are prodrug except
 - (1) Enalapril
 - (2) Lisinopril
 - (3) Perindopril
 - (4) Ramipril
- 82. All are used for treatment of pulmonary hypertension except
 - (1) Bosentan
 - (2) Sildenafil
 - (3) Calcium channel blocker
 - (4) Beta blocker
- 83. The treatment of hyperlipidemic patients with nicotinic acid (Niacin) results in
 - (1) Increase in VLDL
 - (2) Decrease in both plasma cholesterol and TGs.
 - (3) Inhibition of HMG-CoA reductase
 - (4) Decrease in HDL

- 84. Which one of the following statement is incorrect regarding Antiplatelet drug?
 - (1) Ticlopidine can cause neutropenia.
 - (2) Clopidogrel irreversibly blocks P₂Y₁₂ purinergic receptor.
 - (3) Prasugrel is a prodrug.
 - (4) Ticagrelor irreversibly blocks P_2Y_{12} purinergic receptor.
 - 85. Which of the following statements regarding Warfarin is true?
 - It is a prodrug converted to active metabolite in blood spontaneously.
 - (2) It has low lipophilicity and does not cross the placental barrier.
 - (3) It inhibit the activation of Vitamin-K dependent clotting factor.
 - (4) It is inactivated by Protamine.
 - **86.** Choose the most correct statement about Iron therapy.
 - Haemoglobin response to intramuscular iron is faster than with oral iron therapy.
 - (2) Iron must be given orally except in Pernicious Anaemia.
 - (3) Prophylactic iron therapy must be given during pregnancy.
 - (4) Infants on breastfeeding do not require medicinal iron.

- 87. Blood level of which clotting factor declines most rapidly after the initiation of Warfarin therapy?
 - (1) Factor VII
 - (2) Factor IX
 - (3) Factor X
 - (4) Prothrombin
- **88.** Which of the following is NOT an adverse effect of Heparin?
 - (1) Bleeding
 - (2) Thrombocytopenia
 - (3) Hypokalemia
 - (4) Osteoporosis
- 89. Which of the following statements is NOT correct regarding drugs acting on coagulation and thrombosis?
 - (1) Rivaroxaban is a direct factor Xa inhibitor.
 - (2) Dabigratran is an oral direct thrombin inhibitor.
 - (3) Tirofiban is an antiplatelet drug.
 - (4) Dipyridamole is an oral anticoagulant.
- 90. Ezetimibe act by
 - (1) Enhancing excretion of bile acid.
 - (2) Decreasing absorption of cholesterol.
 - (3) Inhibiting HMG-CoA Reductase.
 - (4) Increase uptake of cholesterol by liver.

- 91. Mechanism of action of statin is
 - (1) Inhibition of HMG-CoA synthatase
 - (2) Stimulation of HMG-CoA reductase
 - (3) Indirect increase of LDL receptors synthesis
 - (4) Inhibition of intestinal cholesterol absorption
- 92. Most potent statin is
 - (1) Simvastatin
 - (2) Pitavastatin
 - (3) Atorvastatin
 - (4) Rosuvastatin
- 93. The drugs employed for anti H-pylori therapy include all of the following except
 - (1) Levofloxacin
 - (2) Clarithomycin
 - (3) Tinidazole
 - (4) Amoxicillin
- 94. Which anti-emitic agent (SHT₃ antagonist) can cause Q-T prolongation?

- (1) Ondansetran
- (2) Granisetran
- (3) Palonosetran
- (4) Ramosetran

- 95. Regarding Aprepitant all are true except
 - (1) Agonist at NK₁ receptor
 - (2) It block the emetic action of substance P
 - (3) Metabolized by CYP3AY, 450
 - (4) It crosses the blood brain barrier
- **96.** Anti-emetic actions are produced by all mechanism except
 - (1) Decrease CTZ stimulation
 - (2) H₁ Antagonistic action
 - (3) Olfactory apparatus stimulation
 - (4) SHT₄ Agonistic action
- 97. A small amount of Atropine is added to Diphenoxylate during treatment of diarrhoea in order to
 - (1) Suppress associated vomiting of gastroenteritis
 - (2) Discourage overdose and abuse of Diphenoxylate
 - (3) Block side effect of Dephenoxylate
 - (4) Augment the anti-motility action of Dephenoxylate.
- 98. The following drug is useful in treatment of neurogenic Diabetes insipidus except
 - (1) Amiloride

- (2) Chlorpropamide
- (3) Carbamazepine
- (4) Hydrochlorothiazide

- 99. What is the drug of choice for management of Adrenal glucocorticoid induced Osteoporosis?
 - (1) Alendronate
 - (2) Calcitonin
 - (3) Estrogen
 - (4) Vitamin D
- 100. Octerotide is used in all except
 - (1) For secretory diarrhoea in carcinoid syndrome
 - (2) Insulinoma
 - (3) Peptic ulcer due to smoking
 - (4) Glucagonoma
- 101. Conversion of T₄ to T₃ is inhibited by all except
 - (1) Methaimazole
 - (2) Propranolol
 - (3) Propylthiouracil
 - (4) Amiodarone
- 102. The clinical use of leuprolide includes all of the following except
 - (1) Endometriosis
 - (2) Prostate cancer
 - (3) Post-menopausal syndrome
 - (4) Precocious puberty
- 103. True about pioglitazone are all except
 - (1) Metabolized by CYP3AY in liver
 - (2) Selective agonist on PPARY
 - (3) Also useful in Diabetus mellitus type l
 - (4) Should be avoided in patient with CHF

- 104. Most likely complication of Insulin therapy during treatment Diabetus ketoacidosis is
 - (1) Hypernatremia
 - (2) Hypoglycemia
 - (3) Pancreatis
 - (4) Hypersensitivity
- 105. Mifepristone is used in all except
 - (1) Medical termination of pregnancy
 - (2) Cervical ripening
 - (3) Post coital contraceptive
 - (4) Threatened abortion
- **106.** Which of the following is aromatase inhibitor?
 - (1) Danazol
 - (2) Itraconazole
 - (3) Letrozole
 - (4) Taxanezole
- 107. Mechanis of action of Tamoxifen is
 - (1) It block the activity of GnRH
 - (2) It inhibits aromatase enzyme lead to decrease formation of estrogen
 - (3) It has partial agonist and antagonist action on estrogen receptor
 - (4) It inhibit the release of FSH and LH from pituitary gland
- **108.** Oral contraceptive pill is useful in preventing all of the following except
 - (1) Ovarian carcinoma
 - (2) Anaemia by reducing the blood loss in menorrhagia
 - (3) Endometrisis
 - (4) Carcinoma breast

- **109.** All of the following Insulin analogues are long acting Insulin except
 - (1) Insulin Glulisine
 - (2) Insulin Glargine
 - (3) Insulin Detemir
 - (4) Insulin Degludec
- **110.** Which Insulin analogue is approved for Intravenous use?
 - (1) Insulin Lispro
 - (2) Insulin Aspart
 - (3) Insulin Glargine
 - (4) Insulin Detemir
- 111. Following statements are true about Sitagliptin except:
 - (1) It causes post-prandial insulin release
 - (2) It decreases glucagon release
 - (3) It slow the gastric emptying
 - (4) It can cause adverse drug reaction like exfoliative dermatitis and Nasopharyngitis
- 112. Which of the following does not cause hypoglycaemia with following anti-diabetic agent?
 - (1) Nateglinide
 - (2) Pioglitazone
 - (3) Tolbutamide
 - (4) Glibenclamide
- 113. Which corticosteroid has maximum mineralocorticoid activity among the following drugs?
 - (1) Dexamethasone
 - (2) Betamethasone
 - (3) Prednisolone
 - (4) Methylprednisolone

- 114. Bremelanotide is approved to use for
 - (1) Hormone-refractory prostate cancer
 - (2) Post-menopausal osteoporosis
 - (3) Hypoactive Sexual Desire Disorder (HSDD)
 - (4) Lower Urinary Tract Symptom (LUTS)
- 115. True about Tibolone except
 - (1) It is a non-steroidal drug
 - (2) It has estrogenic activity
 - (3) It has progestational activity
 - (4) It has weak anti-androgenic activity
- 116. Bisphosphanates are used in all except
 - (1) Paget's disease
 - (2) Vitamin D excess
 - (3) Postmenopausal Osteoporosis
 - (4) Hypercalcemia of malignancy
- 117. All of the following agents are Tocolytics except
 - (1) Ritodrine
 - (2) Nifedipine
 - (3) Atosiban
 - (4) Apixaban
- 118. Pretomanid is a/an

- (1) Antiviral drug
- (2) Anticancer drug
- (3) Anti-Tubercular drug
- (4) Drug for Rheumatoid arthritis

- 119. All of the following drugs are bactericidal except
 - (1) Rifampin
 - (2) Vancomycin
 - (3) Carbencillin
 - (4) Tigecycline
- **120.** All of the following statements about Penicillin are true except
 - (1) It is active secreted in nephron tubules.
 - (2) It is commonly administered orally.
 - (3) It has narrow spectrum of activity.
 - (4) It act by inhibiting cell wall synthesis.
 - 121. The following is true about Vancomycin except
 - It is bactericidal primarily used against gram positive bacteria.
 - (2) It act by inhibiting bacterial protein synthesis.
 - (3) It can cause dose related ototoxicity.
 - (4) Vancomycin is not absorbed orally.
 - 122. All antimicrobial agent obtain from Fungi except
 - (1) Chloramphenicol
 - (2) Penicillin
 - (3) Cephalosporin
 - (4) Griseofulvin
 - 123. Which of the following is not true regarding Tetracycline?
 - (1) It has antianabolic effect.
 - (2) It can cause tooth discoloration.
 - (3) It do not cause superinfection.
 - (4) It is a bacteriostatic agent.

- 124. The most common mechanism by which gram negative bacilli acquire chloramphenicol resistance is
 - Decreased permeability into the bacterial cell.
 - (2) Acquisition of a plasmid encoded for chloramphenicol acetyl transferase.
 - (3) Lowered affinity for bacterial ribosomes.
 - (4) Expulsion of chloramphenicol from bacterial cell.
- 125. Which of the Fluoroquinolone can be used safely in renal failure?
 - (1) Ofloxacin
 - (2) Ciprofloxacin
 - (3) Pefloxacin
 - (4) Comefloxacin
- 126. Cephalosporin which can cause bleeding as adverse drug reaction is
 - (1) Ceftriaxone
 - (2) Cefotaxime
 - (3) Cefazolin
 - (4) Ceftazidime
- Slow acetylators of Isoniazid are more prone to develop
 - (1) Failure of therapy
 - (2) Allergic reaction
 - (3) Hepatotoxicity
 - (4) Peripheral neuropathy

- 128. In leprosy, the best bactericidal agent is
 - (1) Clofazimine
 - (2) Dapsone
 - (3) Rifampicin
 - (4) Ofloxacin
- 129. Griseofulvin is not useful in one of the following:
 - (1) Tinea Capitis
 - (2) Tinea Cruris
 - (3) Tinea Versicolor
 - (4) Tinea Pedis
- **130.** Metronidazole is least likely to be effective in the treatment of
 - (1) Hepatic amoebiasis
 - (2) Infection caused by Bacteroides fragilis
 - (3) Pseudo membranous colitis
 - (4) Pneumococcal Pneumonia
- 131. Drugs of the choice for the treatment of neurocysticercosis
 - (1) Hydroquinone and metronidazole
 - (2) Mentronidazole and pyrental palmoate
 - (3) Cyclophosphomide and tinidazole

- (4) Albendazole and praziquantal
- 132. All of the following are protease inhibitor for AIDS except
 - (1) Indinavir
 - (2) Abacanavir
 - (3) Saquinavir
 - (4) Lopinavir

- 133. Which of the following statements is false regarding Adefovir dipivoxil?
 - (1) Acyclic nucleotide analogue
 - (2) Well tolerated orally
 - (3) Used in chronic Hepatitis B infection
 - (4) Used in anti-retroviral therapy
- 134. Anti-malarial drug is known to cause neuropsychiatric adverse reaction
 - (1) Mefloquine
 - (2) Amodiaquine
 - (3) Quinine
 - (4) Tafenoquinine
- **135.** Which of the following statements is false regarding Itraconazole?
 - (1) It has broad antifungal spectrum.
 - (2) Oral absorption is reduced by H₂ blocker.
 - (3) It does not have inhibitory effect on CYP3A4 like ketoconazole.
 - (4) It can be given by IV route.
- **136.** Antiviral drug is in use for COVID-19 which was useful for Ebola virus
 - (1) Adefovir
 - (2) Remdesivir
 - (3) Telbuvudine
 - (4) Enfuvirtide
- 137. Following are the common properties of Aminoglycosides antibiotic except
 - (1) All are more active in acidic pH
 - (2) All are excreted unchanged in urine
 - (3) All exhibit ototoxicity and nephrotoxicity
 - (4) All are not absorbed orally

- 138. Which of the following anticancer drug is not obtained from plants?
 - (1) Irinotecan
 - (2) Paclitaxel
 - (3) Doxorubicin
 - (4) Etoposidebine
- 139. Hemorrhagic cystitis is caused by
 - (1) Cyclophosphamide
 - (2) 6-mercaptopurine
 - (3) 5-Flurouracil
 - (4) Busulfan
- 140. Which of the following is not an alkylating agent?
 - (1) Cyclophosphamide
 - (2) Lomustine (Nitrosourea)
 - (3) Dacarbazine
 - (4) Estramustine
- **141.** Following statements regarding methotrexate are true except
 - Toxicity of methotrexate can be reverse by Folic acid.
 - (2) Can be administrered by oral and IV route.
 - (3) It exerts major toxicity on bone marrow.
 - (4) It commonly used in psoriasis.
- 142. Treatment of choice for chronic myeloid Leukaemia is
 - Hydroxyl-urea
 - (2) Imatinib
 - (3) Interferon alpha
 - (4) Pemetrexed

- 143. All of the following drugs are used orally in Psoriasis except
 - (1) Glucocorticoid
 - (2) Methotrexate
 - (3) Acitretin
 - (4) Apremilast
- **144.** Which of the following is not a Demelanizing Agent?
 - (1) Hydroquinone
 - (2) Monobenzone
 - (3) Psoralen
 - (4) Azelaic acid
- 145. Which of the Vitamin-B adversely affect the therapeutic response of Levo-dopa?
 - (1) Vitamin B₁
 - (2) Vitamin B₂
 - (3) Vitamin B₅
 - (4) Vitamin B₆
- 146. Vitamin B₆ deficiency is seen with the use of all of the following drugs except
 - (1) Cycloserine
 - (2) Cyclosporine
 - (3) INH
 - (4) d-Penicillamine
- 147. Which of the following pair is incorrect match regarding monoclonal antibodies and their common use?
 - (1) Abciximab Antiplatelet
 - (2) Rituximab Colon carcinoma
 - (3) Omalizumab Bronchial asthma
 - (4) Transtuzumab Breast carcinoma

- 148. An immunosuppressant is know to bind to cyclophilin and inhibit the action of calcineurin. Now patients should be monitored for which toxicity of that drug?
 - (1) Pulmonary fibrosis
 - (2) Hypotension
 - (3) Hypoglycaemia
 - (4) Nephrotoxicity
- 149. Which of the following drug can result in cyanide poisoning?
 - (1) Hydralazine
 - (2) Sodium Nitroprusside
 - (3) Hydroxycobalamin
 - (4) Sodium thiosulphate
- **150.** Which of the following drug is not used in scabies?
 - (1) Ciclopirox
 - (2) Ivermectin
 - (3) Lindane
 - (4) Crotamiton
- 151. Antihelmenthic also acting as immunomodulator is
 - (1) Pyrantel pamoiate
 - (2) Piperazine
 - (3) Levamisol
 - (4) Niclosomide
- **152.** Most commonly used chelating agent in Wilson's disease

- (1) Deferiprone
- (2) Dimercaprol
- (3) Penicillamine
- (4) EDTA

- 153. Loading dose of a drug depends upon
 - (1) Volume of distribution
 - (2) Clearance
 - (3) Rate of administration
 - (4) Half life of drug
- 154. ED_{50} of a drug is a measure of
 - (1) Safety
 - (2) Potency
 - (3) Efficacy
 - (4) Toxicity
- 155. As per "Drugs and Cosmetic Act" prescription drugs are included in
 - (1) Schedule C
 - (2) Schedule H
 - (3) Schedule P
 - (4) Schedule X
- 156. Most drugs gain entry to cell by
 - (1) Passive diffusion with zero-order kinetics
 - (2) Passive diffusion with first-order kinetics
 - (3) Active transport with zero-order kinetics
 - (4) Active transport with first-order kinetics

- 157. Drugs that are highly bound to albumin:
 - (1) Effectively cross the BBB
 - (2) Are easily filtered at the glomerulus
 - (3) Used to have large volume of distribution
 - (4) Can compete with other drugs to bind with albumin
 - 158. Which of the phase-II drug metabolism can have a genetic polymorphism?
 - (1) Glucuronidation
 - (2) Acetylation
 - (3) Oxidation
 - (4) Glutathione conjugation
 - 159. Pharmacokinetic parameter of morphine include Vd-400 L/70 kg CL-600 ml/min and oral bioavailability fraction (F) = 0.25. What will be the loading dose to achieve a steady-state level of 25 mg/l?
 - (1) 20 mg
 - (2) 40 mg
 - (3) 60 mg
 - (4) 80 mg

- **160.** Which type of drug will have maximum oral bioavailability?
 - (1) Highly hydrophilic drugs
 - (2) Chemically unstable drugs
 - (3) Largely hydrophobic, yet soluble in aqueous solutions
 - (4) Drugs that are P-Glycoprotein substrates

161. An Orphan drug is

- (1) A very cheap drug
- (2) A drug which has no therapeutic use
- (3) A drug used to treat rare disease
- (4) A drug which act on Orphanin receptor
- **162.** Which of the following statement is false about pharmacokinetic of drug?
 - High plasma protein bound drug will have low volume of distribution.
 - (2) Microsomal enzyme are located in mitochondria of hepatic cell.
 - (3) Acidic drug mainly bound to albumin.
 - (4) Most drugs are absorbed in unionized form.

- 163. Idiosyncratic reaction of a drug is
 - A type of hypersensitivity reaction.
 - (2) A type of drug antagonism.
 - (3) Unpredictable inherent abnormal reaction.
 - (4) Quantitatively exaggerated response.
- **164.** Which of the following drugs exhibit the "therapeutic window phenomenon"?
 - (1) Lisinopril
 - (2) Furosemide
 - (3) Lorazepam
 - (4) Imipramine
- 165. In an enzyme inhibition, if $U_{\rm max}$ decrease by 50% and Km remain as before. Type of Enzyme Inhibition
 - (1) Competitive equilibrium type
 - (2) Non-competitive type
 - (3) Competitive non-equilibrium type
 - (4) Uncompetitive enzyme desolution
- 166. Which phase of the clinical trial is aimed to decide the maximum tolerable dose of a new drug?
 - (1) Phase II Randomised control trial
 - (2) Phase III Randomised control trial
 - (3) Phase I clinical trial
 - (4) Case control study

- 167. Phase 4 (IV) of clinical trial collect information about
 - (1) Drug efficacy
 - (2) Drug potency
 - (3) Drug toxicity
 - (4) Pharmaco economics and market feasibility
- 168. Following drugs are used for overactive bladder, except
 - (1) Darifenacin
 - (2) Duloxetine
 - (3) Oxybutynin
 - (4) Flavoxate
- 169. Which of the following symptoms would you expect to see in carbonate poisoning?
 - (1) Urinary retention
 - (2) Tachycardia
 - (3) Constriction of pupil
 - (4) Dry mouth
- 170. Oral bioavailability is maximum out of following Beta (β) blocker
 - (1) Metoprolol
 - (2) Atenolol
 - (3) Acebutolol
 - (4) Bisoprolol

- 171. Which of the following statement is correct regarding sympathetic neurotransmission?
 - Adrenaline is major neurotransmitter released for sympathetic nerve.
 - (2) Nor-adrenaline is major neurotransmitter released from Adrenal gland.
 - (3) Cocaine prevent reuptake of noradrenaline in presynaptic terminal.
 - (4) Monoamine oxidase-A (MAO-A) converts dopamine to noradrenaline
- 172. Following statements are correct regarding Alpha (α) blocker, except
 - Alpha (α) blocker are used for treatment of hypotension in anaphylactic shock.
 - (2) Alpha (α) blocker are used for treatment of Benign Hypertrophy of Prostate (BHP).
 - (3) Alpha (α) blocker may cause tachycardia.
 - (4) Alpha (α) blocker may cause nasal stuffiness.
- 173. Drug which can be used to block the reflex Bradycardia caused by Alpha-1 agonist
 - (1) Metoprolol
 - (2) Atropine
 - (3) Mirtazepine
 - (4) Ephedrine

- 174. In bronchiolar smooth muscle, activation of muscarinic receptor will lead to
 - (1) Increase in IP₃ and DA₄.
 - (2) Activation of Adenyle cyclase.
 - (3) Decrease in cAMP.
 - (4) Inhibition of protein kinase C.
- 175. Autonomic nerve supply to Thermoregulatory sweat gland is
 - (1) Cholinergic nerves and muscarinic-3 receptor
 - (2) Adrenergic nerves and Alpha-1 receptors
 - (3) Adrenergic nerves and Beta-2 receptor
 - (4) Neurohumorally-released epinephrine
- 176. Following statements are false, except
 - Hemicholinium decrease/prevent the release of ACh from storage vesicles.
 - (2) Botulin toxin increase the ACh release
 - (3) Pralidoxime reactivates
 Acetylcholine esterase
 - (4) Vesamicol inhibit the uptake of choline

- 177. True statement about Atropine except
 - (1) It is the drug of choice for cycloplegia in children.
 - (2) It is used to treat belladonna poisoning.
 - (3) It can precipitate Glaucoma
 - (4) It is used for A-V block
- 178. Lid retraction is caused by
 - (1) Bimatoprost
 - (2) Latanoprost
 - (3) Brimonidine
 - (4) Apraclonidine
- Short duration of action of Esmolol is due to
 - (1) Rapid redistribution
 - (2) Fast excretion by kidney
 - (3) Hydrolysis by esterase
 - (4) Rapid plasma protein binding
- 180. Correct match of drug and their mechanism of action
 - (1) Brimonidine Decrease aqueous production
 - (2) Bimatoprost Carbonic anhydrase
 - (3) Echothiophate Increase
 Uveoscleral
 outflow

inhibitor

(4) Timolol - Increase trabecular outflow

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