

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

!!JAY AMBE!!

**MULTIPLE CHOICE QUESTIONS
(PHARMACOLOGY)**

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PHARMACOLOGY (MCQ)

1. Which of the following anti-arrhythmic drug is having Iodine?

- A. Disopyramide
- B. Flecainide
- C. Amiodarone
- D. Quinidine

Ans. C

2. Which of the following pairs has an interaction beneficial for routine clinical use

- A. Pseudoephedrine and Aluminium hydroxide gel
- B. Tetracycline and milk of magnesia
- C. MAO inhibitor and Tyramine
- D. Chloramphenicol and Tolbutamide

Ans. A

3. The mechanism of action of rifampicin involve

- A. Inhibition of bacterial DNA directed RNA polymerase
- B. Inhibition of mycolic acid synthesis
- C. Inhibition of protein synthesis
- D. Inhibition of trans peptidase

Ans. A

4. Use of isoniazid is restricted due to

- A. Ototoxicity
- B. Hepatotoxicity
- C. Neurotoxicity
- D. Bone marrow depression

Ans. B

5. HIV infection can be clinically controlled with

- A. Cydarabine

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- B. Acyclovir
- C. Zidovudine
- D. Amantadine

Ans. C

6. Which of the following drug blocks the sodium channel and dissociates slowly?

- A. Quinidine
- B. Lignocaine
- C. Flecainide
- D. Procainamide

Ans. C

7. Simvastatin belongs to

- A. HMG CoA reductase inhibitor type of antilipidemic agent
- B. HMG CoA reductase inhibitor type of anticoagulant agent
- C. Fibrate type of anticoagulant agent
- D. Fibrate type of antilipidemic agent

Ans. A

8. Which of the following organism is the Source for amphotericin?

- A. Streptomyces immodosus
- B. Streptomyces nodosus
- C. Streptomyces griseus
- D. Streptomyces aureofaciens

Ans. B

9. Which of the following drug produces gastric irritation after micronization?

- A. Phenobarbital
- B. Tetracycline
- C. Erythromycin
- D. Nitrofurantoin

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Ans. D

10. Adult dose of a drug is 150 mg/kg and the drug is available as tablets of 2 mg strength. Calculate the dose required for a boy of age 14 yrs and weight of 35 kg?

- A. 74.9 mg
- B. 78 mg
- C. 82 mg
- D. 80 mg

Ans. A

11. Which of the following method is used to measure respiratory efficiency of cells in cell culture?

- A. Fluorescein Diacetate method
- B. Reduction of tetrazolium salts
- C. Evan's blue method
- D. Calcofluor white method

Ans. B

12. Which of the following Dopaminergic agonist used in the treatment of Parkinsonism?

- A. Levodopa
- B. Carbidopa
- C. Mirtazapine
- D. Ropinirole

Ans. D

14. What is the principle involved in the VDRL test?

- A. Agglutination
- B. Precipitation
- C. Flocculation
- D. Opsonisation

Ans. B

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15. Prazocine is a derivative of which of the following?

- A. Quinazoline
- B. Phthalazine
- C. Quinoline
- D. Isoquinoline

Ans. A

16. Bladder toxicity is the side effect of which of the following drug?

- A. Vincristine
- B. Cyclophosphamide
- C. 5-Fluoro Uracil
- D. Doxorubicin

Ans. B

17. Which of the following is a prototype of Sedative?

- A. Chloral hydrate
- B. Chloral
- C. Chloroquine
- D. Chlorpheniramine

Ans. B

18. If the half life for decomposition of a drug is 12 hrs, how long will it take for 125 mg of the drug to decompose by 30 %? Assume that the drug follows first order kinetics at constant temperature.

- A. 6.1 hr
- B. 8.2 hr
- C. 7.9 hr
- D. 5.5 hr

Ans. A

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19. In the calculation of total lungs volume capacity, Inspiratory capacity occupy _____ amount of air.

- A. 1200ml
- B. 3600ml
- C. 2400ml
- D. 4800ml

Ans. B

20. Which of the following amino acid is present in Captopril?

- A. Glycine
- B. Cysteine
- C. Proline
- D. Para Amino benzoic acid

Ans. C

21. Pharmacokinetics is:

- A. The study of biological and therapeutic effects of drugs
- B. The study of absorption, distribution, metabolism and excretion of drugs
- C. The study of mechanisms of drug action
- D. The study of methods of new drug development

Ans. B

22. What does “pharmacokinetics” include?

- A. Complications of drug therapy
- B. Drug biotransformation in the organism
- C. Influence of drugs on metabolism processes
- D. Influence of drugs on genes

Ans. B

23. What does “pharmacokinetics” include?

- A. Pharmacological effects of drugs

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- B. Unwanted effects of drugs
- C. Chemical structure of a medicinal agent
- D. Distribution of drugs in the organism

Ans. D

24. What does “pharmacokinetics” include?

- A. Localization of drug action
- B. Mechanisms of drug action
- C. Excretion of substances
- D. Interaction of substances

Ans. C

25. The main mechanism of most drugs absorption in GI tract is:

- A. Active transport (carrier-mediated diffusion)
- B. Filtration (aqueous diffusion)
- C. Endocytosis and exocytosis
- D. Passive diffusion (lipid diffusion)

Ans. D

26. What kind of substances can't permeate membranes by passive diffusion?

- A. Lipid-soluble
- B. Non-ionized substances
- C. Hydrophobic substances
- D. Hydrophilic substances

Ans. D

27. A hydrophilic medicinal agent has the following property:

- A. Low ability to penetrate through the cell membrane lipids
- B. Penetrate through membranes by means of endocytosis
- C. Easy permeation through the blood-brain barrier
- D. High reabsorption in renal tubules

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Ans. A

28. What is implied by «active transport»?

- A. Transport of drugs through a membrane by means of diffusion
- B. Transport without energy consumption
- C. Engulf of drug by a cell membrane with a new vesicle formation
- D. Transport against concentration gradient

Ans. D

29. What does the term “bioavailability” mean?

- A. Plasma protein binding degree of substance
- B. Permeability through the brain-blood barrier
- C. Fraction of an uncharged drug reaching the systemic circulation following any route administration
- D. Amount of a substance in urine relative to the initial dose

Ans. C

30. The reasons determining bioavailability are:

- A. Rheological parameters of blood
- B. Amount of a substance obtained orally and quantity of intakes
- C. Extent of absorption and hepatic first-pass effect
- D. Glomerular filtration rate

Ans. C

31. Pick out the appropriate alimentary route of administration when passage of drugs through liver is minimized:

- A. Oral
- B. Transdermal
- C. Rectal
- D. Intraduodenal

Ans. C

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32. Which route of drug administration is most likely to lead to the first-pass effect?

- A. Sublingual
- B. Oral
- C. Intravenous
- D. Intramuscular

Ans. B

33. What is characteristic of the oral route?

- A. Fast onset of effect
- B. Absorption depends on GI tract secretion and motor function
- C. A drug reaches the blood passing the liver
- D. The sterilization of medicinal forms is obligatory

Ans. B

34. Tick the feature of the sublingual route:

- A. Pretty fast absorption
- B. A drug is exposed to gastric secretion
- C. A drug is exposed more prominent liver metabolism
- D. A drug can be administered in a variety of doses

Ans. A

35. Pick out the parenteral route of medicinal agent administration:

- A. Rectal
- B. Oral
- C. Sublingual
- D. Inhalation

Ans. D

36. Parenteral administration:

- A. Cannot be used with unconsciousness patients

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- B. Generally results in a less accurate dosage than oral administration
- C. Usually produces a more rapid response than oral administration
- D. Is too slow for emergency use

Ans. C

37. What is characteristic of the intramuscular route of drug administration?

- A. Only water solutions can be injected
- B. Oily solutions can be injected
- C. Opportunity of hypertonic solution injections
- D. The action develops slower, than at oral administration

Ans. B

38. Correct statements listing characteristics of a particular route of drug administration include all of the following EXCEPT:

- A. Intravenous administration provides a rapid response
- B. Intramuscular administration requires a sterile technique
- C. Inhalation provides slow access to the general circulation
- D. Subcutaneous administration may cause local irritation

Ans. C

39. Biological barriers include all except:

- A. Renal tubules
- B. Cell membranes
- C. Capillary walls
- D. Placenta

Ans. A

40. What is the reason of complicated penetration of some drugs through brain-blood barrier?

- A. High lipid solubility of a drug
- B. Meningitis
- C. Absence of pores in the brain capillary endothelium

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D. High endocytosis degree in a brain capillary

Ans. C

41. The volume of distribution (Vd) relates:

A. Single to a daily dose of an administered drug

B. An administered dose to a body weight

C. An uncharged drug reaching the systemic circulation

D. The amount of a drug in the body to the concentration of a drug in plasma

Ans. D

42. For the calculation of the volume of distribution (Vd) one must take into account:

A. Concentration of a substance in plasma

B. Concentration of substance in urine

C. Therapeutical width of drug action

D. A daily dose of drug

Ans. A

43. The term “biotransformation” includes the following:

A. Accumulation of substances in a fat tissue

B. Binding of substances with plasma proteins

C. Accumulation of substances in a tissue

D. Process of physicochemical and biochemical alteration of a drug in the body

Ans. D

44. Biotransformation of the drugs is to render them:

A. Less ionized

B. More pharmacologically active

C. More lipid soluble

D. Less lipid soluble

Ans. D

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45. Tick the drug type for which microsomal oxidation is the most prominent:

- A. Lipid soluble
- B. Water soluble
- C. Low molecular weight
- D. High molecular weight

Ans. A

46. Pick out the right statement:

- A. Microsomal oxidation always results in inactivation of a compound
- B. Microsomal oxidation results in a decrease of compound toxicity
- C. Microsomal oxidation results in an increase of ionization and water solubility of a drug
- D. Microsomal oxidation results in an increase of lipid solubility of a drug thus its excretion from the organism is facilitated

Ans. C

47. Stimulation of liver microsomal enzymes can:

- A. Require the dose increase of some drugs
- B. Require the dose decrease of some drugs
- C. Prolong the duration of the action of a drug
- D. Intensify the unwanted reaction of a drug

Ans. A

48. Metabolic transformation (phase 1) is:

- A. Acetylation and methylation of substances
- B. Transformation of substances due to oxidation, reduction or hydrolysis
- C. Glucuronide formation
- D. Binding to plasma proteins

Ans. B

49. Biotransformation of a medicinal substance results in:

- A. Faster urinary excretion

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- B. Slower urinary excretion
- C. Easier distribution in organism
- D. Higher binding to membranes

Ans. A

50. Conjugation is:

- A. Process of drug reduction by special enzymes
- B. Process of drug oxidation by special oxidases
- C. Coupling of a drug with an endogenous substrate
- D. Solubilization in lipids

Ans. C

51. Which of the following processes proceeds in the second phase of biotransformation?

- A. Acetylation
- B. Reduction
- C. Oxidation
- D. Hydrolysis

Ans. A

52. Conjugation of a drug includes the following EXCEPT:

- A. Glucoronidation
- B. Sulfate formation
- C. Hydrolysis
- D. Methylation

Ans. C

54. In case of liver disorders accompanied by a decline in microsomal enzyme activity the duration of action of some drugs is:

- A. Decreased
- B. Enlarged
- C. Remained unchanged

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D. Changed insignificantly

Ans. B

55. Half life ($t_{1/2}$) is the time required to:

A. Change the amount of a drug in plasma by half during elimination

B. Metabolize a half of an introduced drug into the active metabolite

C. Absorb a half of an introduced drug

D. Bind a half of an introduced drug to plasma proteins

Ans. A

56. Half life ($t_{1/2}$) doesn't depend on:

A. Biotransformation

B. Time of drug absorption

C. Concentration of a drug in plasma

D. Rate of drug elimination

Ans. B

57. Elimination is expressed as follows:

A. Rate of renal tubular reabsorption

B. Clearance speed of some volume of blood from substance

C. Time required to decrease the amount of drug in plasma by one-half

D. Clearance of an organism from a xenobiotic

Ans. D

58. Pharmacodynamics involves the study of following EXCEPT:

A. Biological and therapeutic effects of drugs

B. Absorption and distribution of drugs

C. Mechanisms of drug action

D. Drug interactions

Ans. B

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59. What does “affinity” mean?

- A. A measure of how tightly a drug binds to plasma proteins
- B. A measure of how tightly a drug binds to a receptor
- C. A measure of inhibiting potency of a drug
- D. A measure of bioavailability of a drug

Ans. B

60. Irreversible interaction of an antagonist with a receptor is due to:

- A. Ionic bonds
- B. Hydrogen bonds
- C. Covalent bonds
- D. All of the above

Ans. C

61. Tick the second messenger of G-protein-coupled (metabotropic receptor):

- A. Adenylyl cyclase
- B. Sodium ions
- C. Phospholipase C
- D. cAMP

Ans. D

62. Which effect may lead to toxic reactions when a drug is taken continuously or repeatedly?

- A. Refractoriness
- B. Cumulative effect
- C. Tolerance
- D. Tachyphylaxis

Ans. B

63. What term is used to describe a decrease in responsiveness to a drug which develops in a few minutes?

- A. Refractoriness

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B. Cumulative effect

C. Tolerance

D. Tachyphylaxis

Ans. D

64. Most local anesthetic agents consist of:

A. Lipophilic group (frequently an aromatic ring)

B. Intermediate chain (commonly including an ester or amide)

C. Amino group

D. All of the above

Ans. D

65. Indicate the local anesthetic agent, which has a shorter duration of action:

A. Lidocaine

B. Procaine

C. Bupivacaine

D. Ropivacaine

Ans. B

66. Indicate the drug, which has greater potency of the local anesthetic action:

A. Lidocaine

B. Bupivacaine

C. Procaine

D. Mepivacaine

Ans. B

67. Which one of the following local anesthetics is an ester of benzoic acid?

A. Lidocaine

B. Procaine

C. Ropivacaine

D. Cocaine

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Ans. D

68. Local anesthetics are:

- A. Weak bases
- B. Weak acids
- C. Salts
- D. None of the above

Ans. A

69. Which of the following local anesthetics is called a universal anesthetic?

- A. Procaine
- B. Ropivacaine
- C. Lidocaine
- D. Bupivacaine

Ans. C

70. Which of the following cholinomimetics activates both muscarinic and nicotinic receptors?

- A. Lobeline
- B. Pilocarpine
- C. Nicotine
- D. Bethanechol

Ans. D

71. Indicate cholinesterase activator:

- A. Pralidoxime
- B. Edrophonium
- C. Pilocarpine
- D. Isoflurophate

Ans. A

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72. Which of the following cholinomimetics is most widely used for paralytic ileus and atony of the urinary bladder?

- A. Lobeline
- B. Neostigmine
- C. Pilocarpine
- D. Echothiophate

Ans. B

73. Which of the following drugs is both a muscarinic and nicotinic blocker?

- A. Atropine
- B. Benztropine
- C. Hexamethonium
- D. Succinylcholine

Ans. B

74. Which of the following agents is a ganglion-blocking drug?

- A. Homatropine
- B. Hexamethonium
- C. Rapacuronium
- D. Edrophonium

Ans. B

75. Indicate the skeletal muscle relaxant, which is a depolarizing agent:

- A. Vecuronium
- B. Scopolamine
- C. Succinylcholine
- D. Hexamethonium

Ans. C

76. Which of the following drugs is a nondepolarizing muscle relaxant?

- A. Pancuronium

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- B. Succinylcholine
- C. Hexamethonium
- D. Scopolamine

Ans. A

77. Which of the following drugs is useful in the treatment of Parkinson's disease?

- A. Benztropine
- B. Edrophonium
- C. Succinylcholine
- D. Hexamethonium

Ans. A

78. Which of the following drugs has “double-acetylcholine” structure?

- A. Rocuronium
- B. Carbachol
- C. Atracurium
- D. Succylcholine

Ans. D

79. Indicate the long-acting neuromuscular blocking agent:

- A. Rapacurium
- B. Mivacurium
- C. Tubocurarine
- D. Rocuronium

Ans. C

80. Which competitive neuromuscular blocking agent could be used in patients with renal failure?

- A. Atracurium
- B. Succinylcholine
- C. Pipecuronium

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D. Doxacurium

Ans. A

81. Catecholamine includes following EXCEPT:

A. Ephedrine

B. Epinephrine

C. Isoprenaline

D. Norepinephrine

Ans. A

82. A relatively pure alfa agonist causes all of the following effects EXCEPT:

A. Increase peripheral arterial resistance

B. Increase venous return

C. Has no effect on blood vessels

D. Reflex bradycardia

Ans. C

83. Which of the following effects is associated with beta-3 receptor stimulation?

A. Lipolysis

B. Decrease in platelet aggregation

C. Bronchodilation

D. Tachycardia

Ans. A

84. Indicate the alfa-2 selective agonist:

A. Xylometazoline

B. Epinephrine

C. Dobutamine

D. Methoxamine

Ans. A

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85. Which of the following agents is a nonselective beta receptor agonist?

- A. Norepinephrine
- B. Terbutaline
- C. Isoproterenol
- D. Dobutamine

Ans. C

86. Indicate the beta-1 selective agonist:

- A. Isoproterenol
- B. Dobutamine
- C. Metaproterenol
- D. Epinephrine

Ans. B

87. Epinephrine produces all of the following effects EXCEPT:

- A. Positive inotropic and chronotropic actions on the heart (beta receptor)
- B. Increase peripheral resistance (alfa receptor)
- C. Predominance of alfa effects at low concentration
- D. Skeletal muscle blood vessel dilatation (beta receptor)

Ans. C

88. Epinephrine is used in the treatment of all of the following disorders EXCEPT:

- A. Bronchospasm
- B. Anaphylactic shock
- C. Cardiac arrhythmias
- D. Open-angle glaucoma

Ans. C

89. Norepinephrine produces:

- A. Vasoconstriction
- B. Vasodilatation

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- C. Bronchodilation
- D. Decreased potassium concentration in the plasma

Ans. A

90. Indicate the sympathomimetic, which may cause hypotension, presumably because of a clonidine-like effect:

- A. Methoxamine
- B. Phenylephrine
- C. Xylometazoline
- D. Isoproterenol

Ans. C

91. Indicate the agent of choice in the emergency therapy of anaphylactic shock:

- A. Methoxamine
- B. Terbutaline
- C. Norepinephrine
- D. Epinephrine

Ans. D

92. Nonselective alfa-receptor antagonists are most useful in the treatment of:

- A. Asthma
- B. Cardiac arrhythmias
- C. Pheochromocytoma
- D. Chronic hypertension

Ans. C

93. Which of the following drugs is useful in the treatment of pheochromocytoma?

- A. Phenylephrine
- B. Propranolol
- C. Phentolamine
- D. Epinephrine

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Ans. C

94. Indicate adrenoreceptor antagonist agents, which are used for the management of pheochromocytoma:

- A. Selective beta-2 receptor antagonists
- B. Nonselective beta-receptor antagonists
- C. Indirect-acting adrenoreceptor antagonist drugs
- D. Alfa-receptor antagonists

Ans. D

95. The principal adverse effects of phentolamine include all of the following EXCEPT:

- A. Diarrhea
- B. Bradycardia
- C. Arrhythmias
- D. Myocardial ischemia

Ans. B

96. Beta-blocking agents have all of the following effects except:

- A. Increase plasma concentrations of HDL and decrease of VLDL
- B. Bronchoconstriction
- C. Decrease of aqueous humor production
- D. "membrane-stabilizing" action

Ans. A

97. Beta-receptor antagonists cause:

- A. Stimulation of lipolysis
- B. Stimulation of gluconeogenesis
- C. Inhibition of glycogenolysis
- D. Stimulation of insulin secretion

Ans. C

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98. Propranolol has all of the following cardiovascular effects EXCEPT:

- A. It decreases cardiac work and oxygen demand
- B. It reduces blood flow to the brain
- C. It inhibits the renin secretion
- D. It increases the atrioventricular nodal refractory period

Ans. B

99. Indicate a beta receptor antagonist, which has very long duration of action:

- A. Metoprolol
- B. Propranolol
- C. Nadolol
- D. Pindolol

Ans. C

100. Indicate a beta-1 selective receptor antagonist, which has very long duration of action:

- A. Betaxolol
- B. Sotalol
- C. Nadolol
- D. Metoprolol

Ans. A

101. Characteristics of reserpine include all of the following EXCEPT:

- A. It inhibits the uptake of norepinephrine into vesicles and MAO
- B. It decreases cardiac output, peripheral resistance and inhibits pressor reflexes
- C. It may cause a transient sympathomimetic effect
- D. It depletes stores of catecholamines and serotonin in the brain

Ans. A

102. Select a hypnotic drug, which is a benzodiazepine derivative:

- A. Zolpidem
- B. Flurazepam

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- C. Secobarbital
- D. Phenobarbitone

Ans. B

103. Which of the following barbiturates is an ultra-short-acting drug?

- A. Secobarbital
- B. Amobarbital
- C. Thiopental
- D. Phenobarbital

Ans. C

104. Indicate the barbituric acid derivative, which has 4-5 days elimination half-life:

- A. Secobarbital
- B. Thiopental
- C. Phenobarbital
- D. Amobarbital

Ans. C

105. Which of the following hypnotic drugs is more likely to cause cumulative and residual effects?

- A. Zolpidem
- B. Temazepam
- C. Phenobarbital
- D. Triazolam

Ans. C

106. Hepatic microsomal drug-metabolizing enzyme induction leads to:

- A. Barbiturate tolerance
- B. Cumulative effects
- C. Development of physical dependence
- D. "hangover" effects

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Ans. A

107. Barbiturates increase the rate of metabolism of:

- A. Anticoagulants
- B. Digitalis compounds
- C. Glucocorticoids
- D. All of the above

Ans. D

108. Which of the following agents inhibits hepatic metabolism of hypnotics?

- A. Flumazenil
- B. Cimetidin
- C. Phenytoin
- D. Theophylline

Ans. B

109. Which of the following hypnotic agents is able to interact with both BZ - 1 and BZ – 2 receptor subtypes?

- A. Zaleplon
- B. Phenobarbital
- C. Flurazepam
- D. Zolpidem

Ans. C

110. Which of the following agents blocks the chloride channel directly?

- A. Secobarbital
- B. Flumazenil
- C. Zaleplon
- D. Picrotoxin

Ans. D

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111. Which of the following agents is preferred in the treatment of insomnia?

- A. Barbiturates
- B. Hypnotic benzodiazepines
- C. Ethanol
- D. Phenothiazide

Ans. B

112. Indicate the main claim for an ideal hypnotic agent:

- A. Rapid onset and sufficient duration of action
- B. Minor effects on sleep patterns
- C. Minimal “hangover” effects
- D. All of the above

Ans. D

113. Which stage of sleep is responsible for the incidence of dreams?

- A. REM sleep
- B. Slow wave sleep
- C. Stage 2 NREM sleep
- D. All of the above

Ans. A

114. During slow wave sleep (stage 3 and 4 NREM sleep):

- A. Dreams occur
- B. The secretion of adrenal steroids is at its highest
- C. Somnambulism and nightmares occur
- D. The secretion of somatotropin is at its lowest

Ans. C

115. All of the hypnotic drugs induce:

- A. Increase the duration of REM sleep
- B. Decrease the duration of REM sleep

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- C. Do not alter the duration of REM sleep
- D. Increase the duration of slow wave sleep

Ans. B

116. Which of the following hypnotic drugs causes least suppression of REM sleep?

- A. Flumazenil
- B. Phenobarbital
- C. Flurazepam
- D. Secobarbital

Ans. C

117. The mechanism of action of antiseizure drugs is:

- A. Enhancement of GABAergic (inhibitory) transmission
- B. Diminution of excitatory (usually glutamatergic) transmission
- C. Modification of ionic conductance
- D. All of the above mechanisms

Ans. D

118. The drug against myoclonic seizures is:

- A. Primidone
- B. Carbamazepine
- C. Clonazepam
- D. Phenytoin

Ans. B

119. The most effective drug for stopping generalized tonic-clonic status epilepticus in adults is:

- A. Lamotrigine
- B. Ethosuximide
- C. Diazepam
- D. Zonisamide

Ans. D

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120. Select the appropriate consideration for phenytoin:

- A. It blocks sodium channels
- B. It binds to an allosteric regulatory site on the GABA-BZ receptor and prolongs the openings of the Cl channels
- C. It effects on Ca²⁺ currents, reducing the low-threshold (T-type) current
- D. It inhibits GABA-transaminase, which catalyzes the breakdown of GABA

Ans. A

121. Phenytoin is used in the treatment of:

- A. Petit mal epilepsy
- B. Grand mal epilepsy
- C. Myoclonic seizures
- D. All of the above

Ans. B

123. Dose-related adverse effect caused by phenytoin is:

- A. Physical and psychological dependence
- B. Exacerbated grand mal epilepsy
- C. Gingival hyperplasia
- D. Extrapiramidal symptoms

Ans. C

124. The mechanism of vigabatrin's action is:

- A. Direct action on the GABA receptor-chloride channel complex
- B. Inhibition of GABA aminotransferase
- C. NMDA receptor blockade via the glycine binding site
- D. Inhibition of GABA neuronal reuptake from synapses

Ans. D

125. Tiagabine:

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Blocks neuronal and glial reuptake of GABA from synapses
- B. Inhibits GABA-T, which catalyzed the breakdown of GABA
- C. Blocks the T-type Ca²⁺ channels
- D. Inhibits glutamate transmission at AMPA/kainate receptors

Ans. A

126. Indicate the drug that induces parkinsonian syndromes:

- A. Chlorpromazine
- B. Diazepam
- C. Triazolam
- D. Carbamazepine

Ans. A

127. Which of the following drugs is used in the treatment of Parkinsonian disorders?

- A. Phenytoin
- B. Selegiline
- C. Haloperidol
- D. Fluoxetine

Ans. B

128. Select the agent, which is preferred in the treatment of the drug-induced form of parkinsonism:

- A. Levodopa
- B. Bromocriptine
- C. Benztropine
- D. Dopamine

Ans. C

129. Indicate a peripheral dopa decarboxylase inhibitor:

- A. Tolcapone
- B. Clozapine

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- C. Carbidopa
- D. Selegiline

Ans. C

130. The mechanism of carbidopa's action is:

- A. Stimulating the synthesis, release, or reuptake of dopamine
- B. Inhibition of dopa decarboxylase
- C. Stimulating dopamine receptors
- D. Selective inhibition of catechol-O-methyltransferase

Ans. B

131. Which of the following vitamins reduces the beneficial effects of levodopa by enhancing its extracerebral metabolism?

- A. Pyridoxine
- B. Thiamine
- C. Tocopherol
- D. Riboflavin

Ans. A

132. Which of the following antiparkinsonian drugs has also been used to treat hyperprolactinemia?

- A. Benztropine
- B. Bromocriptine
- C. Amantadine
- D. Levodopa

Ans. B

133. Indicate a selective inhibitor of monoamine oxidase B:

- A. Levodopa
- B. Amantadine
- C. Tolcapone

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

D. Selegiline

Ans. D

134. Which of the following statements is correct?

A. MAO-A metabolizes dopamine; MAO-B metabolizes serotonin

B. MAO-A metabolizes norepinephrine and dopamine; MAO-B metabolizes serotonin

C. MAO-A metabolizes norepinephrine and serotonin; MAO-B metabolizes dopamine

D. MAO-A metabolizes dopamine; MAO-B metabolizes norepinephrine and serotonin

Ans. C

135. Which of the following antiparkinsonian drugs is an antiviral agent used in the prophylaxis of influenza A?

A. Selegiline

B. Sinemet

C. Pergolide

D. Amantadine

Ans. D

136. Which of the following antiparkinsonism drugs is an anticholinergic agent?

A. Amantadine

B. Selegilin

C. Trihexyphenidyl

D. Bromocriptine

Ans. C

137. Alcohol potentiates:

A. SNS depressants

B. Vasodilators

C. Hypoglycemic agents

D. All of the above

Ans. D

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

138. Which of the following agents is an inhibitor of aldehyde dehydrogenase?

- A. Fomepizole
- B. Ethanol
- C. Disulfiram
- D. Naltrexone

Ans. C

139. Indicate the drug, which alters brain responses to alcohol:

- A. Naltrexone
- B. Disulfiram
- C. Amphetamine
- D. Chlorpromazine

Ans. A

140. Which of the following agents is an opioid antagonist?

- A. Amphetamine
- B. Naltrexone
- C. Morphine
- D. Disulfiram

Ans. B

141. Which of the following agents may be used as an antidote for ethylene glycol and methanol poisoning?

- A. Disulfiram
- B. Fomepizol
- C. Naltrexone
- D. Amphetamine

Ans. B

142. Mu (μ) receptors are associated with:

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Analgesia, euphoria, respiratory depression, physical dependence
- B. Spinal analgesia, mydriasis, sedation, physical dependence
- C. Dysphoria, hallucinations, respiratory and vasomotor stimulation
- D. Analgesia, euphoria, respiratory stimulation, physical dependence

Ans. A

143. Which of the following opioid receptor types is responsible for euphoria and respiratory depression?

- A. Kappa-receptors
- B. Delta-receptors
- C. Mu-receptors
- D. All of the above

Ans. C

144. Indicate the opioid receptor type, which is responsible for dysphoria and vasomotor stimulation:

- A. Kappa-receptors
- B. Delta-receptors
- C. Mu-receptors
- D. All of the above

Ans. A

145. Kappa and delta agonists:

- A. Inhibit postsynaptic neurons by opening K⁺ channels
- B. Close a voltage-gated Ca²⁺ channels on presynaptic nerve terminals
- C. Both a and b
- D. Inhibit of arachidonate cyclooxygenase in CNS

Ans. B

146. Which of the following opioid agents is used in the treatment of acute opioid overdose?

- A. Pentazocine

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- B. Methadone
- C. Naloxone
- D. Remifentanyl

Ans. C

147. Non-narcotic agents cause:

- A. Respiratory depression
- B. Antipyretic effect
- C. Euphoria
- D. Physical dependence

Ans. B

148. Correct statements concerning aspirin include all of the following EXCEPT:

- A. It inhibits mainly peripheral COX
- B. It does not have an anti-inflammatory effect
- C. It inhibits platelet aggregation
- D. It stimulates respiration by a direct action on the respiratory center

Ans. D

149. All of the following are undesirable effects of aspirin EXCEPT:

- A. Gastritis with focal erosions
- B. Tolerance and physical addiction
- C. Bleeding due to a decrease of platelet aggregation
- D. Reversible renal insufficiency

Ans. B

150. Analgin usefulness is limited by:

- A. Agranulocytosis
- B. Erosions and gastric bleeding
- C. Methemoglobinemia
- D. Hearing impairment

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

Ans. A

151. Methemoglobinemia is possible adverse effect of:

- A. Aspirin
- B. Paracetamol
- C. Analgin
- D. Ketorolac

Ans. B

152. Correct the statements concerning ketorolac include all of the following EXCEPT:

- A. It inhibits COX
- B. It is as effective as morphine for a short-term relief from moderate to severe pain
- C. It has a high potential for physical dependence and abuse
- D. It does not produce respiratory depression

Ans. C

153. Select the antiseizure drug with an analgesic component of effect:

- A. Carbamazepine
- B. Ethosuximide
- C. Phenytoin
- D. Clonazepam

Ans. A

154. Which of the following nonopioid agents is an antidepressant with analgesic activity?

- A. Fluoxetine
- B. Moclobemide
- C. Tranylcypamine
- D. Amitriptyline

Ans. D

155. Tick mixed (opioid/non-opioid) agent:

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Paracetamol
- B. Tramadol
- C. Sodium valproate
- D. Butorphanol

Ans. B

156. Most antipsychotic drugs:

- A. Strongly block postsynaptic D-2receptor
- B. Stimulate postsynaptic D-2 receptor
- C. Block NMDA receptor
- D. Stimulate 5-HT2 receptor

Ans. A

157. Hyperprolactinemia is caused by blockade of dopamine in:

- A. The chemoreceptor trigger zone of the medulla
- B. The pituitary
- C. The extrapyramidal system
- D. The mesolimbic and mesofrontal systems

Ans. B

158. Parkinsonian symptoms and tardive dyskinesia are caused by blockade dopamine in:

- A. The nigrostriatal system
- B. The mesolimbic and mesofrontal systems
- C. The chemoreceptor trigger zone of the medulla
- D. The tuberoinfundibular system

Ans. A

159. Extraparalytic reactions can be treated by:

- A. Levodopa
- B. Benztropine mesylate
- C. Bromocriptine
- D. Dopamine

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

Ans. B

160. Lithium carbonate is useful in the treatment of:

- A. Petit mal seizures
- B. Bipolar disorder
- C. Neurosis
- D. Trigeminal neuralgia

Ans. B

161. Which of the following agents is related to tricyclic antidepressants?

- A. Nefazodon
- B. Amitriptyline
- C. Fluoxetine
- D. Isocarboxazid

Ans. B

162. Which of the following antidepressants is a selective serotonin reuptake inhibitor?

- A. Phenelzine
- B. Desipramine
- C. Maprotiline
- D. Fluoxetine

Ans. D

163. The therapeutic response to antidepressant drugs is usually over a period of:

- A. 2-3 days
- B. 2-3 weeks
- C. 24 hours
- D. 2-3 month

Ans. B

164. Which of the following tricyclic and heterocyclic agents has the least sedation?

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Protriptyline
- B. Trazodone
- C. Amitriptyline
- D. Mirtazapine

Ans. A

165. Anxiolytics are used to treat:

- A. Neurosis
- B. Psychosis
- C. Narcolepsy
- D. Bipolar disorders

Ans. A

166. Indicate the mechanism of hypnotic benzodiazepine action:

- A. Increasing the duration of the GABA-gated Cl⁻ channel openings
- B. Directly activating the chloride channels
- C. Increasing the frequency of Cl⁻ channel opening events
- D. All of the above

Ans. C

167. Which of the following anxiolytics has minimal abuse liability?

- A. Oxazepam
- B. Buspirone
- C. Flumazenil
- D. Alprazolam

Ans. B

168. Caffeine does not cause:

- A. Inhibition of gastric secretion
- B. Hyperglycemia
- C. Moderate diuretic action

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

D. Increase in free fatty acids

Ans. A

169. Therapeutic uses of caffeine include all of the following EXCEPT:

A. Cardiovascular collapse and respiratory insufficiency

B. Migraine

C. Somnolence

D. Gastric ulceration

Ans. D

170. Respiratory and cardiac analeptics are all of the following agents EXCEPT:

A. Cordiamine

B. Bemegride

C. Caffeine

D. Camphor

Ans. B

171. Bemegride:

A. Stimulates the medullar respiratory center (central effect)

B. Stimulates hemoreceptors of carotid sinus zone (reflector action)

C. Is a mixed agent (both central and reflector effects)

D. Is a spinal analeptic

Ans. A

172. Which of the following abused drugs do not belong to sedative agents?

A. Barbiturates

B. Tranquilizers

C. Cannabinoids

D. Opioids

Ans. C

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

173. Which of the following agents is related to hallucinogens?

- A. Heroin
- B. LSD
- C. Cocaine
- D. Opium

Ans. B

174. Inhaled anesthetics and intravenous agents having general anesthetic properties:

- A. Directly activate GABA - A receptors
- B. Facilitate GABA action but have no direct action on GABA- A receptors
- C. Reduce the excitatory glutamatergic neurotransmission
- D. Increase the duration of opening of nicotine-activated potassium channels

Ans. A

175. Indicate the anesthetic, which is an inhibitor of NMDA glutamate receptors:

- A. Thiopental
- B. Halothane
- C. Ketamine
- D. Sevoflurane

Ans. C

176. Which of the following general anesthetics belongs to inhalants?

- A. Thiopental
- B. Desfluran
- C. Ketamine
- D. Propofol

Ans. B

177. Indicate the anesthetic, which is used intravenously:

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Propofol
- B. Halothane
- C. Desflurane
- D. Nitrous oxide

Ans. A

178. Which of the following inhalants is a gas anesthetic?

- A. Halothane
- B. Isoflurane
- C. Nitrous oxide
- D. Desflurane

Ans. C

179. Which of the following inhaled anesthetics can produce hepatic necrosis?

- A. Soveflurane
- B. Desflurane
- C. Halothane
- D. Nitrous oxide

Ans. C

180. Indicated the inhaled anesthetic, which may cause nephrotoxicity:

- A. Halothane
- B. Soveflurane
- C. Nitrous oxide
- D. Diethyl ether

Ans. B

181. Gastric acid secretion is under the control of the following agents EXCEPT:

- A. Histamine
- B. Acetylcholine
- C. Serotonin

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

D. Gastrin

Ans. C

182. Indicate the drug belonging to proton pump inhibitors:

A. Pirenzepine

B. Ranitidine

C. Omeprazole

D. Trimethaphan

Ans. C

183. All of the following agents intensify the secretion of gastric glands EXCEPT:

A. Pepsin

B. Gastrin

C. Histamine

D. Carbonate mineral waters

Ans. A

184. Tick the mechanism of Metoclopramide antiemetic action:

A. H-1 and H-2 receptor blocking effect

B. M-cholinoreceptor stimulating effect

C. D2 dopamine and 5-HT₃ serotonin receptor blocking effect

D. M-cholinoblocking effect

Ans. C

185. Pernicious anemia is developed due to deficiency of:

A. Erythropoietin

B. Vitamin B12

C. Iron

D. Vitamin B6

Ans. B

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

186. Select the drug used for pernicious anemia:

- A. Ferrous lactate
- B. Cyanocobalamin
- C. Iron dextran
- D. Ferrous gluconate

Ans. B

187. An adverse effect of oral iron therapy is:

- A. Anemia
- B. Thrombocytopenia
- C. Headache
- D. Constipation

Ans. D

188. Tick the drug used as an oral anticoagulant:

- A. Heparin
- B. Daltreparin
- C. Dicumarol
- D. Enoxaparin

Ans. C

189. Which of the following drugs is fibrinolytic?

- A. Ticlopidine
- B. Streptokinase
- C. Aspirin
- D. Warfarin

Ans. B

190. All of the following are recommended at the initial stages of treating patients with heart failure EXCEPT:

- A. Reduced salt intake

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- B. Verapamil
- C. ACE inhibitors
- D. Diuretics

Ans. B

191. All of the following agents belong to cardiac glycosides EXCEPT:

- A. Digoxin
- B. Strophantin K
- C. Amrinone
- D. Digitoxin

Ans. C

192. The non-glycoside positive inotropic drug is:

- A. Digoxin
- B. Strophantin K
- C. Dobutamine
- D. Digitoxin

Ans. C

193. Aglycone is essential for:

- A. Plasma protein binding
- B. Half-life
- C. Cardiotonic action
- D. Metabolism

Ans. C

194. Choose the derivative of the plant Foxglove (Digitalis):

- A. Digoxin
- B. Strophantin K
- C. Dobutamine
- D. Amrinone

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

Ans. A

195. For digitalis-induced arrhythmias the following drug is favored:

- A. Verapamil
- B. Amiodarone
- C. Lidocaine
- D. Propranolol

Ans. C

196. This drug is used in treating supraventricular tachycardias:

- A. Digoxin
- B. Dobutamine
- C. Amrinone
- D. Dopamine

Ans. A

197. This drug is associated with Torsades de pointes.

- A. Flecainide
- B. Sotalol
- C. Lidocaine
- D. Verapamil

Ans. B

198. This drug has a little or no direct effect on chronotropy and dromotropy at normal doses

- A. Nifedipine
- B. Diltiazem
- C. Verapamil
- D. All of the above

Ans. A

199. Tick the adverse reactions characteristic for lidocaine:

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Agranulocytosis, leucopenia
- B. Extrapyrarnidal disorders
- C. Hypotension, paresthesias, convulsions
- D. Bronchospasm, dyspepsia

Ans. C

200. Choose the selective blocker of beta-1 adrenoreceptors:

- A. Labetalol
- B. Prazosin
- C. Atenolol
- D. Propranolol

Ans. C

201. This drug is an inhibitor of renin synthesis:

- A. Propranolol
- B. Enalapril
- C. Diazoxide
- D. Losartan

Ans. A

202. This drug is a non-peptide angiotensin II receptor antagonist:

- A. Clonidine
- B. Captopril
- C. Losartan
- D. Diazoxide

Ans. B

203. All of the following statements regarding verapamil are true EXCEPT:

- A. It blocks L-type calcium channels
- B. It increases heart rate

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- C. It relaxes coronary artery smooth muscle
- D. It depresses cardiac contractility

Ans. B

204. Progesterone is secreted by:

- A. Ovarian follicles
- B. Corpus luteum
- C. Granulosa and theca cells
- D. All of the above

Ans. B

205. The major natural progestin is:

- A. Estradiol
- B. Estron
- C. Progesterone
- D. Estriol

Ans. D

206. Mifepristone (RU-486) is:

- A. Antiprogestin
- B. Antiandrogen
- C. Antiestrogen
- D. Androgen

Ans. D

207. Which of the following NSAIDs is a selective COX-2 inhibitor?

- A. Piroxicam
- B. Indomethacin
- C. Celecoxib
- D. Diclofenac

Ans. C

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

208. Which of the following NSAIDs is a nonselective COX inhibitor

- A. Piroxicam
- B. Rofecoxib
- C. Celecoxib
- D. All of the above

Ans. A

209. Which of the following drugs is a 5-lipoxygenase (5-LOG) inhibitor?

- A. Ibuprofen
- B. Zileuton (Zyflo)
- C. Metamizole (Analgin)
- D. Diclofenac

Ans. B

210. Which of the following drugs is a leucotriene D₄ receptor (LTD₄) blocker?

- A. Ibuprofen
- B. Zileuton (Zyflo)
- C. Zafirleukast (Accolate)
- D. Diclofenac

Ans. C

211. Which of the following drugs is a thromboxane A₂ receptor (TXA₂) antagonist?

- A. Sulotroban
- B. Zileuton (Zyflo)
- C. Zafirleukast (Accolate)
- D. Diclofenac

Ans. A

212. H₁ histamine receptor subtype is distributed in:

- A. Smooth muscle, endothelium and brain

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- B. Gastric mucosa, cardiac muscle, mast cells and brain
- C. Presynaptically in brain, mesenteric plexus and other neurons
- D. All of the above

Ans. A

213. H₂ histamine receptor subtype is distributed in:

- A. Smooth muscle, endothelium and brain
- B. Gastric mucosa, cardiac muscle, mast cells and brain
- C. Presynaptically in brain, mesenteric plexus and other neurons
- D. All of the above

Ans. B

214. Indication for interferon alpha administration is:

- A. Autoimmune diseases
- B. Rheumatoid arthritis
- C. Organ transplantation
- D. Hepatitis C virus infection

Ans. D

215. Indication for interferon alpha administration is:

- A. Prophylaxis of sensitization by Rh antigen
- B. Rheumatoid arthritis
- C. Kaposi's sarcoma
- D. Chronic granulomatous disease

Ans. C

216. Immunomodulating agents are the following EXCEPT:

- A. Cytokines
- B. Levamisole
- C. BCG (Bacille Calmette-Guérin)
- D. Tacrolimus (FK-506)

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

Ans. D

217. Mechanism of action of levamisole is:

- A. Inhibits CD3 receptor
- B. Complement-mediated cytolysis of T lymphocytes
- C. Substitution for patient's deficient immunoglobulins
- D. Increase the number of T-cells

Ans. D

218. Select a fat-soluble vitamin:

- A. Ascorbic acid
- B. Tocopherol
- C. Thiamine
- D. Riboflavin

Ans. B

219. Which of the following vitamins can be also synthesized from a dietary precursor?

- A. Vitamin C
- B. Vitamin A
- C. Vitamin B1
- D. Vitamin B6

Ans. B

220. Which of the following vitamins resembles with hormone

- A. Vitamin K
- B. Vitamin A
- C. Vitamin D
- D. Vitamin E

Ans. C

221. Which of the following vitamins is given along with isoniazide in treatment of tuberculosis?

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Nicotinic acid
- B. Riboflavin
- C. Pyridoxine
- D. Ascorbic acid

Ans. C

222. Which of the following vitamins is also known as an antisterility factor?

- A. Vitamin E
- B. Vitamin B1
- C. Vitamin B6
- D. Vitamin K

Ans. A

224. Mega doses of which vitamin are some time beneficial viral respiratory infections

- A. Vitamin C
- B. Vitamin A
- C. Vitamin K
- D. Vitamin B12

Ans. A

225. Which of the following antienzymes is a monoamine oxidase (MAO) inhibitor:

- A. Physostigmine
- B. Selegiline
- C. Acetazolamide
- D. Disulfiram

Ans. B

226. Which of the following antienzymes is a carbonic anhydrase inhibitor:

- A. Physostigmine
- B. Selegiline
- C. Aminocaproic acid

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

D. Acetazolamide

Ans. D

227. Which of the following antienzymes is a xantine oxidase inhibitor?

A. Physostigmine

B. Allopurinol

C. Aminocaproic acid

D. Acetazolamide

Ans. B

228. Which of the following antienzymes is an aromatase inhibitor used in cancer therapy?

A. Physostigmine

B. Allopurinol

C. Aminocaproic acid

D. Aminoglutethimide

Ans. D

229. Which of the following drugs used in the treatment of gout has as its primary effect the reduction of uric acid synthesis

A. Allopurinol

B. Sulfinpyrazone

C. Colchicine

D. Indomethacin

Ans. A

230. All of the following drugs are antibiotics, EXCEPT:

A. Streptomycin

B. Penicillin

C. Co-trimoxazole

D. Chloramphenicol

Ans. C

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

231. Which of the following drugs is a gastric acid resistant:

- A. Penicillin G
- B. Penicillin V
- C. Carbenicillin
- D. Procain penicillin

Ans. B

232. Which of the following drugs is penicillinase resistant:

- A. Oxacillin
- B. Amoxicillin
- C. Bicillin-5
- D. Penicillin G

Ans. A

233. Aminoglycosides have the following unwanted effects:

- A. Pancytopenia
- B. Hepatotoxicity
- C. Ototoxicity, nephrotoxicity
- D. Irritation of gastrointestinal mucosa

Ans. C

234. Chloramphenicol has the following unwanted effects:

- A. Nephrotoxicity
- B. Pancytopenia
- C. Hepatotoxicity
- D. Ototoxicity

Ans. B

235. Mechanism of Amphotericin B action is:

- A. Inhibition of cell wall synthesis

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- B. Inhibition of fungal protein synthesis
- C. Inhibition of DNA synthesis
- D. Alteration of cell membrane permeability

Ans. D

236. Azoles have an antifungal effect because of:

- A. Inhibition of cell wall synthesis
- B. Inhibition of fungal protein synthesis
- C. Reduction of ergosterol synthesis
- D. Inhibition of DNA synthesis

Ans. C

237. Amfotericin B has the following unwanted effects:

- A. Psychosis
- B. Renal impairment, anemia
- C. Hypertension, cardiac arrhythmia
- D. Bone marrow toxicity

Ans. B

238. Tick the drug belonging to antibiotics having a polyene structure:

- A. Nystatin
- B. Ketoconazole
- C. Griseofulvin
- D. All of the above

Ans. A

239. Mechanism of Isoniazid action is:

- A. Inhibition of protein synthesis
- B. Inhibition of mycolic acids synthesis
- C. Inhibition of RNA synthesis
- D. Inhibition of ADP synthesis

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

Ans. B

240. Mechanism of Rifampin action is:

- A. Inhibition of mycolic acids synthesis
- B. Inhibition of DNA dependent RNA polymerase
- C. Inhibition of topoisomerase II
- D. Inhibition of cAMP synthesis

Ans. B

241. Mechanism of Cycloserine action is:

- A. Inhibition of mycolic acids synthesis
- B. Inhibition of RNA synthesis
- C. Inhibition of cell wall synthesis
- D. Inhibition of pyridoxal phosphate synthesis

Ans. C

242. Mechanism of Streptomycin action is:

- A. Inhibition of cell wall synthesis
- B. Inhibition of protein synthesis
- C. Inhibition of RNA and DNA synthesis
- D. Inhibition of cell membranes permeability

Ans. B

243. Rifampin has the following unwanted effect:

- A. Dizziness, headache
- B. Loss of hair
- C. Flu-like syndrome, tubular necrosis
- D. Hepatotoxicity

Ans. C

244. Isoniazid has following unwanted effect:

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. Cardiotoxicity
- B. Hepatotoxicity, peripheral neuropathy
- C. Loss of hair
- D. Immunotoxicity

Ans. B

245. Streptomycin has the following unwanted effect:

- A. Cardiotoxicity
- B. Hepatotoxicity
- C. Retrobulbar neuritis with red-green color blindness
- D. Ototoxicity, nephrotoxicity

Ans. D

246. Mechanism of aminosalicylic acid action is:

- A. Inhibition of mycolic acids synthesis
- B. Inhibition of folate synthesis
- C. Inhibition of DNA dependent RNA polymerase
- D. Inhibition of DNA gyrase

Ans. B

247. All of the following agents are the first-line antimycobacterial drugs, EXCEPT:

- A. Rifampin
- B. Pyrazinamide
- C. Isoniazid
- D. Streptomycin

Ans. B

248. The mechanism of fluoroquinolones' action is:

- A. Inhibition of phospholipase C
- B. Inhibition of DNA gyrase
- C. Inhibition of bacterial cell synthesis

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

D. Alteration of cell membrane permeability

Ans. B

249. All of the following antiviral drugs are the analogs of nucleosides, EXCEPT:

- A. Acyclovir
- B. Zidovudine
- C. Saquinavir
- D. Didanosine

Ans. C

250. All of the following antiviral drugs are the analogs of nucleosides, EXCEPT:

- A. Acyclovir
- B. Zidovudine
- C. Saquinavir
- D. Didanosine

Ans. B

251. Action mechanism of alkylating agents is:

- A. Producing carbonium ions altering protein structure
- B. Producing carbonium ions altering DNA structure
- C. Structural antagonism against purine and pyrimidine
- D. Inhibition of DNA-dependent RNA synthesis

Ans. B

252. Tick the action mechanism of anticancer drugs belonging to plant alkaloids:

- A. Inhibition of DNA-dependent RNA synthesis
- B. Cross-linking of DNA
- C. Mitotic arrest at a metaphase
- D. Nonselective inhibition of aromatases

Ans. C

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

253. Famotidine act as

- A. H-1 Antagonist
- B. H-2 Antagonist
- C. Proton pump inhibitor
- D. H-2 agonis

Ans. B

254. Identify the selective COX-2 inhibitor is

- A. Ketorolac
- B. Rofecoxib
- C. Indomethacin
- D. Naproxan

Ans. B

255. Acute migraine is treated with

- A. Prazosin
- B. Formetrol
- C. Sumatriptan
- D. Dopamine

Ans. C

256. Allopurinol can inhibit the metabolism of

- A. Cisplatin
- B. Doxorubicin
- C. 6-Mercaptopurine
- D. 5-flurouracil

Ans. C

257. The COC-2 inhibitor is not to be given if patient is already taking

- A. Anti-allergic drug
- B. Anti hypertensive drug

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- C. Anxiolytic drug
- D. Oral anti-diabetic drug

Ans. B

258. Select the specific unwanted effect of L-DOPA

- A. Dementia
- B. Hypertension
- C. Dyskinesia
- D. Excitotoxicity

Ans. C

259. Choose the appropriate use of the Imipramine

- A. Insomnia
- B. Epilepsy
- C. Bed wetting in children
- D. mania

Ans. C

260. An anticholinesterase which is useful in alzheimer's disease

- A. Arecolin
- B. Donezepil
- C. Isoproterenol
- D. Clioquinol

Ans. B

261. Pons is the parts of _____

- A. Brain stem
- B. Diencephalon
- C. Cerebellum
- D. Cerebrum.

Ans. A

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

262. In the middle ear, anvil shaped bone is known as _____.

- A. Incus
- B. Malleus
- C. Stapes
- D. Temporal bone

Ans. A

263. Brain consist _____ amount of neuron.

- A. 1 million
- B. 100 billion
- C. 1000 billion
- D. 10 million

Ans. B

264. According to Rh factor _____ blood group is know as universal donar.

- A. O-ve
- B. O+ve
- C. AB+ve
- D. AB-ve

Ans. A

265. In the Net Filtration Pressure, Blood Colloidal Osmotic Pressure is _____.

- A. 30 MmHg
- B. 10 MmHg
- C. 55 MmHg
- D. 15 MmHg

Ans. A

266. _____ is tidal volume of respiration.

- A. 1200ml

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- B. 6000ml
- C. 2400ml
- D. 500ml

Ans. A

267. Ph of semen is _____

- A. 6 – 7
- B. 4.5 – 6.9
- C. 7.2 – 7.7
- D. 8.4 – 8.9

Ans. D

268. Aqueous humor is completely replaced about every _____.

- A. 90 minutes
- B. 15 minutes
- C. 10 minutes
- D. 1 minutes

Ans. A

269. Partial pressure of carbon dioxide in alveoli is _____.

- A. 160 mmhg
- B. 105 mmhg
- C. 40 mmhg
- D. 45 mmhg

Ans. C

270. Blood consist _____ amount of platletes

- A. 250,000 – 400,00 mm³
- B. 4000 – 11000 mm³
- C. 11000 mm³
- D. 250 mm³

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

Ans. A

271. _____ is the area of highest visual activity or resolution.

- A. Central fovea
- B. Blind spot
- C. Lens
- D. Rods receptors.

Ans. A

272. _____ is minute volume of respiration.

- A. 1200ml
- B. 6000ml
- C. 2400ml
- D. 500ml

Ans. B

273. _____ amount of neutrophils present in

- A. 20 – 25 %
- B. 60 – 70 %
- C. 3 – 8 %
- D. 2 – 4 %

Ans. B

274. The entire nervous system contains _____ amount of CSF.

- A. 80 – 150 ml
- B. 1 liter
- C. 5-15 ml
- D. 500 ml

Ans. A

275. Each lacrimal gland produce about _____ amount per day of lacrimal secretion.

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

- A. 10 ml
 - B. 20ml
 - C. 90 ml
 - D. 1ml
- Ans. D

276. In the ECG, P – wave indicates.

- A. Atrial depolarization
- B. Ventricle Depolarization
- C. Ventricle repolarization
- D. Atrial depolarization.

Ans. A

277. _____ muscles contraction produce dilation of pupils.

- A. Circulatory muscles
- B. Spinctor papillae
- C. Constrictor papillae
- D. Radial muscles

Ans. D

278. When the number of sperm falls below _____, the male is likely to be infertile.

- A. 20 million/ml
- B. 200 million/ml
- C. 50-150 million/ml
- D. 100 million/ml

Ans. A

279. Intraocular tension normally stay about _____

- A. 10 mmhg
- B. 16 mmhg
- C. 25 mmhg

MULTIPLE CHOICE QUESTIONS (PHARMACOLOGY)

D. 100 mmhg

Ans. A

280. Kidney consist _____ amounts of juxtamedullary nephrons.

A. 25- 30 %

B. 15 – 20 %

C. 80 – 85 %

D. 5 – 10%

Ans. B