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ФАРМАКОЛОГИЯ
В ВОПРОСАХ И ОТВЕТАХ.
СБОРНИК ТЕСТОВ

Учебно-методическое пособие для студентов 3 курса
факультета по подготовке специалистов для зарубежных стран
медицинских вузов

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PHARMACOLOGY
IN QUESTIONS AND ANSWER.
TESTS

Study guide for the third-year students
of the faculty on preparation of experts for foreign countries
of higher educational medical institutions

2nd edition, added and fixed

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Сборник тестов содержит 400 тестовых заданий по основным разделам фармакологии в соответствии с типовой программой для студентов высших учебных медицинских учреждений. В связи с тем, что вопросы, представленные в данном пособии, носят не только контролирующий, но и обучающий характер, их можно использовать для углубления и систематизации знаний студентов по программным вопросам фармакологии. На базе приведенных тестов создана компьютерная версия, которая используется для предэкзаменационного тестирования.

Предназначено для студентов 3 курса факультета по подготовке специалистов для зарубежных стран медицинских вузов.

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INTRODUCTION

Tests allow to estimate assimilation of the material and the survival of knowledge in a minimum time frame. The value of testing by pharmacology is proportional to the saturation of the subject with theoretical data.

«Pharmacology in questions and answers» contains 400 tests of different levels of complexity. It contains the main sections of pharmacology in accordance with the standard curriculum for pharmacology for the third-year students of the medical, medical-diagnostic faculties and the faculty on preparation of experts for foreign countries.

Test tasks are divided into main pharmacological groups:

- general pharmacology;
- neurotropic drugs;
- drugs affecting the organ's functions;
- hormonal drugs; agents affecting metabolism, inflammation and immunity;
- chemotherapeutic agents.

Within each pharmacological group, there is no division of questions by the degree of complexity, they are given randomly. Five answers are offered and only one is correct. Answers are given in the end. All this makes it possible to use tests both for training and self-control, and for monitoring students' knowledge during pre-examination testing.

Systematic work with this tests, of course, will contribute to mastering the basic course of pharmacology and can serve as a good foundation for further development of rational pharmacotherapy.

I. GENERAL PHARMACOLOGY

Choose one correct answer

1. Enteral route of drug administration is:

Variants of answer:

- a) intramuscular;
- b) subcutaneous;
- c) inhalation;
- d) oral;
- e) subarachnoidal.

2. Characteristics of oral route of drug administration?

Variants of answer:

- a) rapid onset of drug effect;
- b) can be used in uncounscious patients;
- c) drugs that are destroyed in the GIT can be used;
- d) the rate of drug entry to the blood flow is variable;
- e) drugs should be sterile.

3. Mechanisms of drug absorption in the GIT:

Variants of answer:

- a) facilitated diffusion;
- b) passive diffusion;
- c) active transport;
- d) pinocytosis;
- e) filtration.

4. Weak alkaline drugs should be taken:

Variants of answer:

- a) on an empty stomach;
- b) after eating;
- c) there is no connection with food intake;
- d) on an empty stomach, washed down with slightly alkaline solutions;
- e) after eating, washing with slightly acidic solutions.

5. Which dosage form is absorbed and gets into the bloodstream faster?

Variants of answer:

- a) solution;
- b) suspension;
- c) tablets;
- d) capsules;
- e) dragee.

6. Characteristics of injections?

Variants of answer:

- a) faster onset of effect than with oral administration;
- b) drugs that are destroyed in the GIT can be used;
- c) can be used in unconscious patients;
- d) drugs should be sterile;
- e) all of the above in a), b), c), d) is true.

7. The most rapid pharmacological effect develops when drug is administered:

Variants of answer:

- a) subcutaneously;
- b) intramuscularly;
- c) intravenously;
- d) orally;
- e) sublingually.

8. Dosage forms for skin:

Variants of answer:

- a) powders;
- b) pastes;
- c) ointments;
- d) emulsions;
- e) all of the above in a), b), c), d) is true.

9. Gases and volatile liquids are administered:

Variants of answer:

- a) inside;
- b) intramuscularly;
- c) intravenously;
- d) inhalation;
- e) subarachnoidally.

10. Parenteral route of drug administration:

Variants of answer:

- a) sublingual;
- b) rectal;
- c) oral;
- d) duodenal;
- e) subarachnoid.

11. Increased activity of microsomal liver enzymes leads to:

Variants of answer:

- a) inactivation of the drug;

- b) slowing the inactivation of the drug;
- c) toxicity of the drug;
- d) strengthening the main effect of the drug;
- e) an increase in the number of side effects.

12. For what method of drug administration the bioavailability of the drug is 100 %?

Variants of answer:

- a) rectal;
- b) oral;
- c) sublingual;
- d) intravenous;
- e) transcutaneous.

13. Indicate the main route of drug removal from the body:

Variants of answer:

- a) kidneys (with urine);
- b) liver (with bile);
- c) lungs (with exhaled air);
- d) sweat glands (with sweat);
- e) breasts (with milk).

14. What does clearance characterize?

Variants of answer:

- a) the rate of absorption;
- b) completeness of absorption;
- c) distribution;
- d) the content of the active form of the drug in the blood;
- e) the rate of elimination of the drug from the body.

15. What does bioavailability characterize?

Variants of answer:

- a) the completeness and speed of the drug entry to the blood flow;
- b) distribution;
- c) the intensity of metabolism;
- d) the rate of elimination;
- e) the degree of binding by blood proteins.

16. Type of action of drugs restoring the activity of the central nervous system in diseases accompanied by mental and motor excitement?

Variants of answer:

- a) tonic;
- b) stimulating;

- c) sedative;
- d) depressing;
- e) paralyzing.

17. Type of action of drugs activating mental and muscular activity both in norm and in pathology?

Variants of answer:

- a) tonic;
- b) stimulating;
- c) sedative;
- d) depressing;
- e) paralyzing.

18. Type of action of drugs that almost completely stop the functioning of the body?

Variants of answer:

- a) tonic;
- b) stimulating;
- c) sedative;
- d) depressing;
- e) paralyzing.

19. A patient gets 2 ml of 2 % papaverine hydrochloride solution intramuscularly twice daily. What is the daily dose of the drug?

Variants of answer:

- a) 0.02;
- b) 0.04;
- c) 0.06;
- d) 0.08;
- e) 0.1.

20. A patient gets 1 ml of 1 % morphine hydrochloride solution intramuscularly 3 times daily. What is the daily dose of the drug?

Variants of answer:

- a) 30 mg;
- b) 40 mg;
- c) 50 mg;
- d) 60 mg;
- e) 80 mg.

21. A patient gets 2 ml of 2 % drotaverine solution intramuscularly twice daily. What is the daily dose of the drug?

Variants of answer:

- a) 60 mg;

- b) 80 mg;
- c) 120 mg;
- d) 160 mg;
- e) 180 mg.

22. A patient gets 1 ml of 2 % papaverine hydrochloride solution intramuscularly twice daily. What is the daily dose of the drug?

Variants of answer:

- a) 20 mg;
- b) 40 mg;
- c) 60 mg;
- d) 80 mg;
- e) 100 mg.

23. Features of a children's organism?

Variants of answer:

- a) faster absorption of drugs than in adults;
- b) the permeability of histohematological barriers, including BBB, is higher than in adults;
- c) the activity of microsomal liver enzymes is lower than in adults;
- d) a lower glomerular filtration rate than in adults;
- e) all of the above in a), b), c), d) is true.

24. An effect of repeated drug use?

Variants of answer:

- a) tolerance;
- b) idiosyncrasy;
- c) summation;
- d) potentiation;
- e) synergy;

25. Blood pressure slightly increased after repeated administration of ephedrine in 20 min after the first administration. What is the reason for it?

Variants of answer:

- a) idiosyncrasy;
- b) tolerance;
- c) cumulation;
- d) tachyphylaxis;
- e) the first pass effect.

26. What is the name of the accumulation of a drug substance in an organism with repeated administration?

Variants of answer:

- a) idiosyncrasy;

- b) sensitization;
- c) summation;
- d) material cumulation;
- e) functional cumulation.

27. What phenomenon can occur in the combined use of drugs?

Variants of answer:

- a) idiosyncrasy;
- b) functional cumulation;
- c) addictive;
- d) material cumulation;
- e) synergy.

28. The effect of drugs during pregnancy which leads to congenital malformations?

Variants of answer:

- a) mutagenic;
- b) carcinogenic;
- c) teratogenic;
- d) embryotoxic;
- e) fetotoxic.

29. Give an example of pharmacodynamic incompatibility of drugs when combined:

Variants of answer:

- a) papaverine hydrochloride when mixed in a single syringe with digitalis preparations forms a precipitate;
- b) furosemide shortens and weakens many drugs, contributing to their excretion;
- c) iron sulfate forms insoluble complexes with tetracyclines, which makes it difficult to absorb;
- d) phenobarbital weakens the action of neodicumarin by inducing microsomal liver enzymes;
- e) atropine weakens the effect of muscarinic agonist pilocarpine on smooth muscle by muscarinic receptors blockage.

30. Mark an example of competitive antagonism:

Variants of answer:

- a) papaverine hydrochloride when mixed in a single syringe with digitalis preparations forms a precipitate;
- b) furosemide shortens and weakens many drugs, contributing to their excretion;

- c) iron sulfate forms insoluble complexes with tetracyclines, which makes it difficult to absorb;
- d) phenobarbital weakens the action of neodicumarin by inducing microsomal liver enzymes;
- e) atropine weakens the effect of muscarinic agonist pilocarpine on smooth muscle by muscarinic receptors blockage.

31. What is pathogenetic pharmacotherapy?

Variants of answer:

- a) pharmacotherapy aimed at the disease symptoms eliminating;
- b) pharmacotherapy aimed at preventing disease;
- c) pharmacotherapy aimed at eliminating the cause of the disease;
- d) pharmacotherapy aimed at mechanisms of disease development;
- e) pharmacotherapy aimed at compensating for a deficiency of biologically active substances in the body.

32. What is preventive pharmacotherapy?

Variants of answer:

- a) pharmacotherapy aimed at the disease symptoms eliminating;
- b) pharmacotherapy aimed at preventing disease;
- c) pharmacotherapy aimed at eliminating the cause of the disease;
- d) pharmacotherapy aimed at mechanisms of disease development;
- e) pharmacotherapy aimed at compensating for a deficiency of biologically active substances in the body.

33. What is replacement pharmacotherapy?

Variants of answer:

- a) pharmacotherapy aimed at the disease symptoms eliminating;
- b) pharmacotherapy aimed at preventing disease;
- c) pharmacotherapy aimed at eliminating the cause of the disease;
- d) pharmacotherapy aimed at mechanisms of disease development;
- e) pharmacotherapy aimed at compensating for a deficiency of biologically active substances in the body.

II. NEUROTROPIC DRUGS

Choose one correct answer

34. A drug for terminal anesthesia.

Variants of answer:

- a) dicaine;
- b) analgin;
- c) morphine;
- d) nitroglycerin;
- e) paracetamol.

35. A drug for infiltration anesthesia.

Variants of answer:

- a) anaprilin;
- b) Aminazine;
- c) Dicaine;
- d) anesthesin;
- e) Novocaine.

36. What substance is added to the solutions of local anesthetics to decrease their absorption?

Variants of answer:

- a) atropine;
- b) isadrine;
- c) epinephrine;
- d) glucose;
- e) sodium chloride.

37. An anesthetic with expressed vasoconstricting activity?

Variants of answer:

- a) novocaine;
- b) dicaine;
- c) anesthesin;
- d) cocaine;
- e) bupivacaine.

38. An astringent?

Variants of answer:

- a) sodium bicarbonate;
- b) starch mucilage;
- c) bismuth nitrate basic;

- d) anesthesin;
- e) ammonia solution.

39. A drug for flatulence.

Variants of answer:

- a) simethicone;
- b) almagel;
- c) atropine;
- d) cimetidine;
- e) sodium bicarbonate.

40. An irritant:

Variants of answer:

- a) anesthesin;
- b) novocain;
- c) dicaine;
- d) tannin;
- e) 40 % ethyl alcohol.

41. Mechanism of action of pilocarpine:

Variants of answer:

- a) stimulates muscarinic receptors;
- b) blocks muscarinic receptors;
- c) blocks adrenergic receptors;
- d) stimulates GABA-receptors;
- e) inhibits cholinesterase.

42. Main effects of pilocarpine.

Variants of answer:

- a) increases intraocular pressure;
- b) decreases intraocular pressure;
- c) facilitates neuromuscular transmission;
- d) complicates neuromuscular transmission;
- e) bronchodilation.

43. Main indication of use of muscarinic antagonists.

Variants of answer:

- a) hypertension;
- b) angina pectoris;
- c) peptic ulcer of stomach and duodenum;
- d) glaucoma;
- e) myasthenia gravis.

44. Localization of muscarinic receptors:

Variants of answer:

- a) carotid glomeruli;
- b) chromaffin cells of adrenal medulla;
- c) skeletal muscle cells;
- d) cells of effector organs in the region of endings of cholinergic fibers;
- e) all the answer are correct.

45. Side effect of muscarin-like agents.

Variants of answer:

- a) increased blood pressure;
- b) increased intraocular pressure;
- c) spasm of accommodation;
- d) dry mouth;
- e) paralysis of accommodation.

46. What is A mechanism of action of prozeryn?

Variants of answer:

- a) inhibits monoamine oxidase;
- b) inhibits cholinesterase;
- c) inhibits reverse neuronal seizure of norepinephrine;
- d) inhibits catechol-o-methyltransferase;
- e) reactivates cholinesterase.

47. An antidote for organophosphorus anticholinesterase agents:

Variants of answer:

- a) unithiol;
- b) nalorphine;
- c) vikasol;
- d) cititone;
- e) atropine in combination with cholinesterase reagents.

48. Mark the main effect of proserin:

Variants of answer:

- a) increased intraocular pressure;
- b) increased blood pressure;
- c) increased neuromuscular transmission;
- d) difficulty in neuromuscular transmission;
- e) weakening of secretion of digestive juices.

49. The main indication for the use of anticholinesterase drugs.

Variants of answer:

- a) essential hypertension;

- b) stomach and duodenal ulcer;
- c) myasthenia gravis;
- d) angina pectoris;
- e) bronchial asthma.

50. A drug for myasthenia.

Variants of answer:

- a) aceclidine;
- b) pyridostigmine;
- c) cititone;
- d) mezatone;
- e) diazepam.

51. An indirect cholinergic agonist.

Variants of answer:

- a) atropine;
- b) proserin;
- c) pilocarpine;
- d) galanthamine;
- e) epinephrine.

52. A drug that reduces the effect of proserin on tone and bowel motility.

Variants of answer:

- a) anaprilin;
- b) octadine;
- c) atropine;
- d) phosphacol;
- e) suxamethonium chloride.

53. An anticholinesterase drug:

Variants of answer:

- a) atropine;
- b) scopolamine;
- c) neostigmine;
- d) isonitrosozine;
- e) metoprolol.

54. Anticholinesterase drugs don't cause:

Variants of answer:

- a) miosis;
- b) paralysis of accommodation;
- c) bradycardia;
- d) an increase in the tone of smooth muscle organs;
- e) facilitation of neuromuscular transmission.

55. Mechanism of action of atropine.

Variants of answer:

- a) inhibits monoamine oxidase;
- b) inhibits cholinesterase;
- c) blocks the re-uptake of the transmitter;
- d) blocks muscarinic receptors;
- e) excites α -adrenergic receptors.

56. One of the main effects of atropine:

Variants of answer:

- a) decreases the intraocular pressure;
- b) causes myopia;
- c) increases the tone of smooth muscles;
- d) increases the tone of the skeletal musculature.
- e) decrease the secretion of exocrine glands.

57. What muscarinic antagonists are used for?

Variants of answer:

- a) to cause accommodation paralysis during glasses prescribing;
- b) to dilate pupils in ophthalmoscopy;
- c) the treatment of gastric and duodenal ulcer;
- d) for cardiac blockage;
- e) all of the above is true.

58. Indicate the drug that causes the longest dilation of pupils.

Variants of answer:

- a) scopolamine;
- b) tropicamide;
- c) platyphylline;
- d) atropine;
- e) epinephrine.

59. A typical side effect of muscarinic antagonists.

Variants of answer:

- a) narrowing of the pupils (miosis);
- b) vascular collapse;
- c) bradycardia;
- d) lacrimation;
- e) dilated pupils (mydriasis).

60. A symptom of a muscarinic antagonist overdose?

Variants of answer:

- a) bradycardia;

- b) bronchospasm;
- c) miosis;
- d) difficulty urinating;
- e) involuntary defecation.

61. What is wrong?

Variants of answer:

- a) pilocarpine reversibly inhibits cholinesterase;
- b) atropine blocks muscarinic receptors;
- c) proserin is an indirect cholinergic agonist;
- d) neostigmine is used to treat myasthenia gravis;
- e) all answer are incorrect.

62. What is A mechanism of action of benzohexonium?

Variants of answer:

- a) stimulates muscarinic receptors;
- b) blocks muscarinic receptors;
- c) stimulates nicotinic receptors;
- d) blocks nicotinic receptors;
- e) blocks cholinesterase.

63. Nicotin is a:

Variants of answer:

- a) nicotinic agonist;
- b) muscarinic agonist;
- c) anticholinesterase drug;
- d) nicotinic antagonist;
- e) muscarinic antagonist.

64. To cause controlled hypotension benzohexonium is administered:

Variants of answer:

- a) orally;
- b) subcutaneously;
- c) intramuscularly;
- d) as intravenous push;
- e) intravenously by drop infusion under the control of blood pressure;

65. A typical side effect of ganglionic blockers.

Variants of answer:

- a) spasmodic vascular contractions;
- b) hypertensive crisis;
- c) orthostatic collapse;
- d) narrowing of the pupils (miosis);
- e) psychosis.

66. Ganglionic blockers block:

Variants of answer:

- a) α -adrenergic receptors;
- b) β -adrenergic blockers;
- c) nicotinic receptors;
- d) μ -opioid receptors;
- e) H_2 -histamine receptors.

67. A mechanism of action of tubocurarine.

Variants of answer:

- a) stimulates muscarinic receptors;
- b) blocks muscarinic receptors;
- c) stimulates nicotinic receptors;
- d) blocks nicotinic receptors of skeletal muscles;
- e) blocks α -adrenergic receptors.

68. Identify a pharmacological group. Applied to relax the striated muscles. Blocks neuromuscular transmission. Quickly causes apnea.

Variants of answer:

- a) muscarinic antagonists;
- b) neuromuscular blockers;
- c) tranquilizers;
- d) antipsychotics;
- e) anti-Parkinsonics.

69. An effect of suxamethonium.

Variants of answer:

- a) increased secretion of the digestive glands;
- b) decreased secretion of digestive glands;
- c) increased smooth muscle tone;
- d) lowering the tone of smooth muscles
- e) relaxation of the striated muscle;

70. Main indication for use of neuromuscular blockers.

Variants of answer:

- a) to cause accommodation paralysis during glasses prescribing;
- b) postoperative intestinal atony;
- c) to relax the skeletal muscles during operations;
- d) for relief of hypertensive crisis;
- e) bronchial asthma.

71. A short-acting neuromuscular blocker.

Variants of answer:

- a) diazepam;

- b) aminazine;
- c) suxamethonium;
- d) tubocurarine;
- e) proserine.

72. A tubocurarine antidote.

Variants of answer:

- a) anaprilin;
- b) atropine;
- c) phentolamine;
- d) proserine;
- e) suxamethonium.

73. The main effect of mezaton.

Variants of answer:

- a) increases the heart rate and force of the myocardial contractility;
- b) decreases the heart rate and force of the myocardial contractility;
- c) causes vasoconstriction and increases blood pressure;
- d) dilates blood vessels and lowers blood pressure;
- e) dilates the bronchi.

74. Identify a pharmacological group. Increases blood pressure. The tone of bronchial muscles is practically not affected. Applied in hypotension, collapse:

Variants of answer:

- a) muscarinic agonists;
- b) non-selective cholinergic agonists;
- c) α -adrenergic agonists;
- d) β -adrenergic agonists;
- e) ganglionic blockers.

75. The main indication for use of centrally acting α_2 -adrenergic agonists.

Variants of answer:

- a) bronchial asthma;
- b) vascular collapse;
- c) hypertension;
- d) atony of the intestine;
- e) myasthenia gravis.

76. One of the main indications for use of α_1 -adrenergic agonists is:

Variants of answer:

- a) coronary artery disease;
- b) heart failure;

- c) vascular collapse;
- d) cardiac blockade;
- e) hypertensive crisis.

77. A drug increasing blood pressure.

Variants of answer:

- a) nitroglycerin;
- b) benzohexonium;
- c) novocaine;
- d) norepinephrine;
- e) izadrine.

78. An effect of salbutamol.

Variants of answer:

- a) dilates the bronchi;
- b) dilates the pupils;
- c) cause vasospasm;
- d) constricts the bronchi;
- e) relaxes the skeletal musculature.

79. Routes of noradrenaline administration:

Variants of answer:

- a) subcutaneously;
- b) intramuscularly;
- c) intravenously;
- d) orally;
- e) inhalation.

80. Which of these substances weakens the broncholytic effect of salbutamol?

Variants of answer:

- a) anaprilin;
- b) atropine;
- c) prednisolone;
- d) benzohexonium;
- e) ephedrine.

81. A β_2 -adrenergic agonist.

Variants of answer:

- a) fenoterol;
- b) dobutamine;
- c) isadrine;
- d) phentolamine;
- e) norepinephrine.

82. Mechanism of action of adrenaline.

Variants of answer:

- a) stimulates α -adrenergic receptors;
- b) blocks β - adrenergic receptors;
- c) stimulates α - and β - adrenergic receptors;
- d) stimulates release of a transmitter;
- e) blocks adrenergic receptors.

83. A topical drug for rhinitis:

Variants of answer:

- a) norepinephrine;
- b) salbutamol;
- c) xylometazoline;
- d) fenoterol;
- e) clonidine.

84. A mechanism of action of phentolamine:

Variants of answer:

- a) stimulates α -adrenergic receptors;
- b) blocks α -adrenergic receptors;
- c) stimulates β - adrenergic receptors;
- d) blocks β -adrenergic receptors;
- e) decreases amount of norepinephrine in the depot.

85. The main effect of prazosin.

Variants of answer:

- a) decreases heart rate and force of myocardial contractility;
- b) increases heart rate and force of myocardial contractility;
- c) causes vasoconstriction and increases blood pressure;
- d) causes vasodilation and decreases blood pressure;
- e) dilates bronchi.

86. Which one vasodilator is an α -adrenergic blocker?

Variants of answer:

- a) benzhexonium;
- b) sodium nitroprusside;
- c) nicotinic acid;
- d) Aprussin;
- e) doxazosin.

87. Identify an α -adrenergic blocker.

Variants of answer:

- a) prozerine;
- b) prazosin;
- c) reserpine;
- d) propranolol;
- e) mesaton.

88. A mechanism of action of propranolol:

Variants of answer:

- a) stimulates α -adrenergic receptors;
- b) blocks α -adrenergic receptors;
- c) stimulates β -adrenergic receptors;
- d) blocks β -adrenergic receptors;
- e) blocks only β_1 -adrenergic receptors.

89. An effect of propranolol.

Variants of answer:

- a) bronchodilation;
- b) mydriasis;
- c) reduction of heart rate and myocardial contractility force;
- d) a decrease in the tone of the gastrointestinal tract;
- e) a decrease in the tone of the uterus.

90. The main indication for use of selective β_1 -blockers.

Variants of answer:

- a) peptic ulcer of stomach and duodenum;
- b) bronchial asthma;
- c) angina pectoris;
- d) pheochromocytoma;
- e) intestinal atony.

91. A side effect of propranolol.

Variants of answer:

- a) narrow pupils (miosis);
- b) dilated pupils (mydriasis);
- c) bronchospasm;
- d) tachycardia;
- e) constipation.

92. A β_1 -blocker.

Variants of answer:

- a) physostigmine;
- b) cyclodol;

- c) bisoprolol;
- d) captopril;
- e) naloxone.

93. A side effect of β -blockers.

Variants of answer:

- a) tachycardia;
- b) impotence;
- c) increased intraocular pressure;
- d) dry skin and mucous membranes;
- e) paralysis of accommodation.

94. A contraindication for use of β -blockers.

Variants of answer:

- a) sinus tachycardia;
- b) chronic heart failure;
- c) acute heart failure;
- d) hypertension;
- e) migraine.

95. Indications for use of β -blockers.

Variants of answer:

- a) sinus bradycardia;
- b) AV blockade;
- c) acute heart failure;
- d) angina pectoris;
- e) diabetes mellitus.

96. β -blockers cause:

Variants of answer:

- a) decreased heart rate;
- b) increased myocardial contractility;
- c) a decrease in the tone of the bronchi;
- d) increase in heart rate;
- e) decreased myometrium tone.

97. Define a group of drugs. Affect the end of adrenergic fibers: cause depletion of norepinephrine stores. Are used for the treatment of arterial hypertension.

Variants of answer:

- a) α -blockers;

- b) β -blockers;
- c) sympatholytics;
- d) ganglionic blockers;
- e) myotropic vasodilators.

98. Receptors predominantly localized in the myocardium:

Variants of answer:

- a) α_1 -adrenergic receptors;
- b) α_2 -adrenergic receptors;
- c) β_1 -adrenergic receptors;
- d) β_2 -adrenergic receptors;
- e) β_3 -adrenergic receptors.

99. Indications for use of adrenaline:

Variants of answer:

- a) anaphylactic shock;
- b) asystole;
- c) vascular collapse;
- d) to be added to the solutions of local anesthetics;
- e) all the answers are correct.

100. A general anesthetic.

Variants of answer:

- a) nitrazepam;
- b) fluorotane;
- c) phenobarbital;
- d) diphenine;
- e) bemegrid.

101. A drug causing myocardial sensitization to catecholamines?

Variants of answer:

- a) ether;
- b) fluorotane;
- c) nitrous oxide;
- d) sodium oxybutyrate;
- e) thiopental sodium.

102. Ultra short-acting non-inhalational general anesthetic.

Variants of answer:

- a) propofol;
- b) thiopental sodium;
- c) sodium oxybutyrate;
- d) ketamine;
- e) all the answers are correct.

103. A drug that potentiates the action of general anesthetics.

Variants of answer:

- a) naloxone;
- b) proserin;
- c) atropine;
- d) diazepam;
- e) metamizole sodium.

104. A non-inhalational general anesthetic causing «dissociative anesthesia»:

Variants of answer:

- a) ketorolac;
- b) ketamine;
- c) propofol;
- d) thiopental;
- e) etomidate.

105. A drug that isn't used for inhalational anesthesia.

Variants of answer:

- a) nitrous oxide;
- b) xenon;
- c) argon;
- d) sevoflurane;
- e) isoflurane.

106. A drug that isn't used for anesthesia nowadays:

Variants of answer:

- a) ether;
- b) propofol;
- c) ketamine;
- d) nitrous oxide;
- e) thiopental sodium.

107. A hypnotic drug.

Variants of answer:

- a) nitrazepam;
- b) morphine;
- c) valerian tincture;
- d) cyclodol;
- e) aminazine.

108. A drug to be administrated before surgery to prevent reflex bradycardia:

Variants of answer:

- a) morphine;
- b) metamizole;

- c) diphenhydramine;
- d) mezatol;
- e) atropine.

109. A hypnotic drug with weak effect on phases of sleep.

Variants of answer:

- a) phenobarbital;
- b) sodium barbital;
- c) barbamyli;
- d) ethanol;
- e) nitrazepam.

110. A drug that isn't a hypnotic agent:

Variants of answer:

- a) zopiclone;
- b) glycine;
- c) phenobarbital;
- d) phenazepam;
- e) chloral hydrate.

111. Difference of benzodiazepines from barbiturates:

Variants of answer:

- a) more toxic;
- b) disturb the phases of sleep;
- c) drug dependence occurs more often and it is more severe;
- d) practically do not change the phases of sleep;
- e) the "aftereffect" is more pronounced.

112. A benzodiazepine antidote:

Variants of answer:

- a) naloxone;
- b) bemegrid;
- c) unithiol;
- d) flumazenil;
- e) fluoxetine.

113. Effect of ethanol on the CNS:

Variants of answer:

- a) depressing action;
- b) activating action;
- c) nootropic action;
- d) all the answers are correct;
- e) has no effect.

114. A drug for alcoholism treatment:

Variants of answer:

- a) methyl alcohol;
- b) disulfiram;
- c) acetaldehyde;
- d) formaldehyde;
- e) phenolphthalein.

115. Identify a group of drugs. They are effective for pain of any origin. In large doses they cause respiratory depression. With prolonged use, they cause addiction and drug dependence.

Variants of answer:

- a) muscarinic antagonists;
- b) myotropic spasmolytics;
- c) opioid analgesics;
- d) non-opioid analgesics;
- e) local anesthetics.

116. Mechanism of action of morphine?

Variants of answer:

- a) stimulates opioid receptors;
- b) stimulates GABA-receptors;
- c) stimulates benzodiazepine receptors;
- d) blocks opioid receptors;
- e) blocks histamine H₂-receptors.

117. A narcotic analgesic.

Variants of answer:

- a) benzocaine;
- b) ketamine;
- c) analgin;
- d) promedol;
- e) paracetamol.

118. A morphine antidote.

Variants of answer:

- a) bemegrid;
- b) atropine;
- c) vikasol;
- d) naloxone;
- e) proserine.

119. An analgesic used for myocardial infarction.

Variants of answer:

- a) metamizole;
- b) paracetamol;
- c) aminazine;
- d) diazepam;
- e) fentanyl.

120. Side effects of morphine.

Variants of answer:

- a) narrow pupils (miosis);
- b) constipation;
- c) euphoria;
- d) drug dependence;
- e) all of the above in a), b), c), d) is true.

121. An example of neuroleptanalgesia:

Variants of answer:

- a) morphine + diazepam;
- b) promedol + aminazine;
- c) fentanyl + droperidol;
- d) ketoral + ketamine;
- e) metamizole + sulpiride.

122. The strongest analgesic from the list below.

Variants of answer:

- a) paracetamol;
- b) aspirin;
- c) metamizole;
- d) sodium salicylate;
- e) ketorol.

123. Identify a group of drugs. They are effective mostly for inflammatory pain. Have antipyretic and anti-inflammatory properties.

Variants of answer:

- a) general anesthetics;
- b) hypnotics;
- c) opioid analgesics;
- d) antihistamines;
- e) non-opioid analgesics.

124. A mechanism of action of acetylsalicylic acid:

Variants of answer:

- a) inhibits monoamine oxidase;

- b) inhibits cholinesterase;
- c) inhibits cyclooxygenase;
- d) inhibits phospholipase C;
- e) inhibits phosphodiesterase.

125. Non-opioid analgesics are used to treat:

Variants of answer:

- a) severe traumatic pain;
- b) headache caused by increased blood pressure;
- c) intensive pain in the postoperative period;
- d) pain in inoperable patients with malignant tumors;
- e) inflammatory pain.

126. A non-opioid analgesic.

Variants of answer:

- a) anesthesin;
- b) ketorol;
- c) promedol;
- d) ketamine;
- e) fentanyl.

127. A drug with ulcerogenic effect?

Variants of answer:

- a) sulfadimidine;
- b) acetylsalicylic acid;
- c) phenazepam;
- d) digitoxin;
- e) atropine.

128. Why aspirin isn't used to decrease temperature in children with viral infection?

Variants of answer:

- a) no effect;
- b) provokes gastric ulcers;
- c) renal tubular necrosis develops;
- d) hepatogenic encephalopathy develops;
- e) has ototoxic effect.

129. A drug for treatment of status epilepticus.

Variants of answer:

- a) phenobarbital;
- b) diphenine;
- c) diazepam;
- d) ethosuximide;
- e) clonazepam.

130. A mechanism of action of levodopa.

Variants of answer:

- a) increases the content of gamma-aminobutyric acid (GABA) in the CNS;
- b) increases enkephalin content in the CNS;
- c) increases dopamine content in the CNS;
- d) increases serotonin content in the CNS;
- e) increases acetylcholine content in the CNS.

131. An antiparkinson drug.

Variants of answer:

- a) aminazine;
- b) chlorprothixene;
- c) droperidol;
- d) cyclodol;
- e) tubocurarine.

132. An antiparkinson drug affecting dopaminergic processes in the CNS.

Variants of answer:

- a) atropine;
- b) cyclodol;
- c) scopolamine;
- d) levodopa;
- e) aminazine.

133. An Antiparkinson drug:

Variants of answer:

- a) acetylsalicylic acid;
- b) aminocaproic acid;
- c) pramipexole;
- d) atenolol;
- e) falimint.

134. Identify a group of drugs. They have an antipsychotic and a tranquilizing action. Are used for the treatment of psychosis. Side effect: extrapyramidal disorders.

Variants of answer:

- a) opioid analgesics;
- b) antidepressants;
- c) lithium salts;
- d) tranquilizers;
- e) typical antipsychotics.

135. Identify a neuroleptic:

Variants of answer:

- a) nitrazepam;
- b) phenobarbital;
- c) cyclodol;
- d) aminazine;
- e) caffeine.

136. A mechanism of action of aminazine:

Variants of answer:

- a) stimulates α -adrenergic receptors;
- b) stimulates muscarinic receptors;
- c) stimulates dopamine receptors;
- d) blocks dopamine receptors;
- e) blocks monoamine oxidase.

137. The main effect of aminazine.

Variants of answer:

- a) elimination of depression;
- b) elimination of delusions, hallucinations;
- c) stimulation of the centers of the medulla oblongata;
- d) increases motor activity;
- e) increases the tone of the skeletal musculature.

138. The main indication for use of neuroleptics.

Variants of answer:

- a) severe traumatic pain;
- b) parkinsonism;
- c) psychosis;
- d) neurosis;
- e) depression.

139. A drug for the treatment of mental disorders with delirium and hallucinations.

Variants of answer:

- a) levodopa;
- b) cyclodol;
- c) nialamide;
- d) fluorophenazine;
- e) meridil.

140. A phenothiazine neuroleptic.

Variants of answer:

- a) chlorprotoxene;

- b) droperidol;
- c) haloperidol;
- d) aminazine;
- e) levodopa.

141. A drug for neuroleptanalgesia.

Variants of answer:

- a) diazepam;
- b) phenazepam;
- c) droperidol;
- d) phenobarbital;
- e) diphenhydramine.

142. Drugs causing drug-induced parkinsonism.

Variants of answer:

- a) hypnotics;
- b) tranquilizers;
- c) neuroleptics;
- d) lithium salts;
- e) β -blockers.

143. A drug for neuroleptic-induced parkinsonism:

Variants of answer:

- a) cyclodol;
- b) nalorphine;
- c) metoclopramide;
- d) norepinephrine;
- e) dichlorothiazide.

144. An antidepressant:

Variants of answer:

- a) thiopental sodium;
- b) phenobarbital;
- c) levodopa;
- d) carbidopa;
- e) amitriptyline.

145. A mechanism of action of nialamide:

Variants of answer:

- a) inhibits cholinesterase;
- b) inhibits monoamine oxidase;
- c) inhibits catechol-o-methyltransferase;
- d) inhibits adenylate cyclase;
- e) inhibits phospholipase.

146. The main effect of nialamide.

Variants of answer:

- a) suppression of fear, anxiety;
- b) suppression of delusions, hallucinations;
- c) promotes the onset of sleep;
- d) relieves depression;
- e) reduces motor activity.

147. A drug provoking insomnia:

Variants of answer:

- a) phenobarbital;
- b) phenazepam;
- c) aminazine;
- d) nialamide;
- e) lithium carbonate.

148. An antidepressant:

Variants of answer:

- a) aminazine;
- b) phenazepam;
- c) fluoxetine;
- d) piracetam;
- e) ciprofloxacin.

149. The main indication for use of lithium salts.

Variants of answer:

- a) severe traumatic pain;
- b) parkinsonism;
- c) neuroses;
- d) manic conditions;
- e) depression.

150. Identify a group of drugs. They reduce anxiety and fear. Do not affect delirium and hallucinations. Promote the onset of sleep. They have central muscle relaxing and anticonvulsant action. They are used to treat neuroses.

Variants of answer:

- a) lithium salts;
- b) neuroleptics;
- c) antidepressants;
- d) tranquilizers;
- e) psychostimulants.

151. A tranquilizer:

Variants of answer:

- a) sodium oxybutyrate;
- b) chloral hydrate;
- c) fluorophenazine;
- d) phenazepam;
- e) nialamide.

152. What is the mechanism of action of diazepam?

Variants of answer:

- a) activates adrenergic receptors;
- b) blocks adrenergic receptors;
- c) activates GABA receptors by binding to benzodiazepine receptors;
- d) activates histamine receptors;
- e) activates serotonin receptors.

153. The main effect of diazepam:

Variants of answer:

- a) increasing mental and physical performance;
- b) stimulation of the centers of the medulla oblongata;
- c) suppression of delusions, hallucinations;
- d) suppression of fear, anxiety;
- e) antidepressant effect.

154. A drug to treat neurosis:

Variants of answer:

- a) chloral hydrate;
- b) phenazepam;
- c) diphenhydramine;
- d) fluorophenazine decanoate;
- e) propanidide.

155. Tranquilizing action is:

Variants of answer:

- a) elimination of delusions and hallucinations;
- b) improving memory and attention;
- c) elimination of fear and anxiety;
- d) ease of falling asleep;
- e) increasing physical and mental performance.

156. A drug that isn't a tranquilizer:

Variants of answer:

- a) diazepam;

- b) buspirone;
- c) flumazenil;
- d) mezapam (rudothel);
- e) phenazepam.

157. A sedative drug:

Variants of answer:

- a) potassium iodide;
- b) potassium chloride;
- c) potassium bromide;
- d) potassium perchlorate;
- e) potassium hydroxide.

158. A drug that isn't a sedative:

Variants of answer:

- a) motherwort tincture;
- b) tincture of valerian;
- c) tincture of the pion;
- d) hawthorn tincture;
- e) tincture of Eleutherococcus.

159. Identify a drug. It is a 25–30 % solution of menthol in the menthyl ether of isovaleric acid. Can be used for mild angina pectoris, is ineffective for severe angina.

Variants of answer:

- a) trinitrolong;
- b) Corvalol;
- c) Validol;
- d) Chromosomone
- e) methylene blue.

160. Identify a group of drugs. Temporarily increase mental and physical efficiency. Temporarily reduce the need for sleep. Weaken the appetite. Applied with pathological somnolence.

Variants of answer:

- a) tranquilizers;
- b) neuroleptics;
- c) antidepressants;
- d) psychostimulants;
- e) lithium salts.

161. An effect of caffeine:

Variants of answer:

- a) hypnotic;
- b) psychostimulating;
- c) suppress the development of mania;
- d) suppresses delirium, hallucinations;
- e) causes anesthesia.

162. A drug for temporary enhancement of mental and physical performance, a methylxanthine derivative.

Variants of answer:

- a) caffeine;
- b) meridil;
- c) sydnokarb;
- d) piracetam;
- e) aminalon.

163. A psychostimulant:

Variants of answer:

- a) glycine;
- b) aminalon;
- c) phenamine;
- d) desopimone;
- e) nitrazepam.

164. A drug that isn't a psychostimulant:

Variants of answer:

- a) phenamine;
- b) haloperidol;
- c) sydnokarb;
- d) caffeine;
- e) meridil.

165. Mental dependence on caffeine is called:

Variants of answer:

- a) theism;
- b) coffee;
- c) bromism;
- d) cinchonism;
- e) ergotism.

166. A nootropic drug:

Variants of answer:

- a) caffeine;
- b) bemegrid;
- c) all the answer are correct;
- d) paracetamol;
- e) piracetam.

167. A drug for mental insufficiency associated with impaired cerebral circulation of various etiologies:

Variants of answer:

- a) aminazine;
- b) diazepam;
- c) phenobarbital;
- d) piracetam;
- e) caffeine.

168. Analeptics are drugs:

Variants of answer:

- a) depressing respiratory and cough centers;
- b) activating the respiratory and vasomotor centers;
- c) depressing pain impulses through the activation of an antinociceptive system;
- d) activating the emetic center and the trigger zone at the bottom of the IV stomach;
- e) depressing hunger center and activating saturation center.

III. DRUGS AFFECTING ORGAN'S FUNCTIONS

Choose one correct answer

169. Find an incorrect statement:

Variants of answer:

- a) niketamide (cordiamine) is an analeptic;
- b) codeine is an peripherally acting antitussive drug;
- c) acetylcysteine is a mucolytic;
- d) ambroxol stimulates surfactant synthesis;
- e) thermopsis herb infusion is a reflectory acting expectorant.

170. An antitussive drug with local anesthetic activity:

Variants of answer:

- a) codeine;
- b) glaucine;
- c) bromhexine;
- d) dextromethorphan;
- e) libexin.

171. An antitussive drug:

Variants of answer:

- a) thermopsis herb infusion;
- b) codeine;
- c) cititon;
- d) trypsin;
- e) salbutamol.

172. The main effect of codeine.

Variants of answer:

- a) stimulates breathing;
- b) suppresses cough;
- c) increase spitting;
- d) suppresses the formation of foam in the alveoli;
- e) causes liquefaction of sputum.

173. Indicate an antitussive that does not cause drug dependence.

Variants of answer:

- a) morphine;
- b) codeine;
- c) libexin;
- d) potassium iodide;
- e) aminophylline.

174. An antitussive inhibiting respiratory center.

Variants of answer:

- a) libexin;
- b) falimint;
- c) codeine;
- d) broncholitin;
- e) glaucin.

175. A drug that isn't an antitussive:

Variants of answer:

- a) apomorphine;
- b) codeine;
- c) ethylmorphine;
- d) falimint;
- e) tusuprex.

176. Codeine does not have the following effect:

Variants of answer:

- a) antitussive;
- b) analgesic;
- c) constipation;
- d) expectorant;
- e) addiction.

177. Which drug can improve surfactant synthesis?

Variants of answer:

- a) acetylcysteine;
- b) trypsin;
- c) bromhexine;
- d) thermopsis herb infusion;
- e) potassium iodide.

178. A drug that isn't an expectorant:

Variants of answer:

- a) trypsin;
- b) bromhexine;
- c) acetylcysteine;
- d) glaucine;
- e) ambroxol.

179. An expectorant:

Variants of answer:

- a) potassium chloride;

- b) potassium perchlorate;
- c) potassium iodide;
- d) potassium bromide;
- e) potassium cyanide.

180. A bronchodilator:

Variants of answer:

- a) cordiamine;
- b) codeine;
- c) libexin;
- d) salbutamol;
- e) mannitol.

181. A β -adrenergic agonist for bronchial asthma.

Variants of answer:

- a) salbutamol;
- b) aminophylline;
- c) intal (disodium chromoglycate);
- d) atropine;
- e) prednisolone.

182. A bronchodilator with myotropic action.

Variants of answer:

- a) izadrin;
- b) salbutamol;
- c) ephedrine;
- d) aminophylline;
- e) atropine.

183. Name a drug that is not used to stop the attack of bronchial asthma:

Variants of answer:

- a) salbutamol aerosol;
- b) aerosol of isadrin;
- c) intal aerosol (cromolin sodium);
- d) fenoterol aerosol;
- e) prednisolone (into the vein).

184. A dehydrating agent for cardiogenic pulmonary edema.

Variants of answer:

- a) benzohexonium;
- b) furosemide;
- c) morphine;
- d) ethyl alcohol;
- e) mannitol.

185. What drug is contraindicated in cardiogenic pulmonary edema?

Variants of answer:

- a) furosemide;
- b) dopamine;
- c) antifofoilane;
- d) mannitol;
- e) morphine.

186. Bronchodilators:

Variants of answer:

- a) α_1 -agonists;
- b) β_1 -agonists;
- c) β_1 -blockers;
- d) β_2 -agonists;
- e) muscarinic agonists.

187. An inhalation drug for acute bronchial asthma attack:

Variants of answer:

- a) beclomethasone;
- b) salbutamol;
- c) aminophylline;
- d) prednisolone;
- e) triamcinolone.

188. A drug decreasing appetite:

Variants of answer:

- a) tincture of wormwood;
- b) fenfluramine;
- c) etaperazine;
- d) apomorphine;
- e) pancreatin.

189. A drug for substitution therapy for gastric glands insufficiency:

Variants of answer:

- a) pepsin;
- b) pancreatin;
- c) crystalline trypsin;
- d) dehydrocholic acid;
- e) cimetidine.

190. An antiemetic drug blocking dopamine receptors of vomiting center's trigger zone:

Variants of answer:

- a) metoclopramide;
- b) diphenhydramine;
- c) scopolamine;
- d) atropine;
- e) diprazine.

191. A centrally acting emetic drug:

Variants of answer:

- a) metronidazole;
- b) zinc sulphate;
- c) apomorphine;
- d) domperidone;
- e) metoclopramide.

192. Indicate when the drug metoclopramide will be ineffective:

Variants of answer:

- a) vomiting in stomach ulcer;
- b) vomiting in uremia;
- c) motion sickness;
- d) nausea and vomiting in hyperacid gastritis;
- e) vomiting in radiation sickness.

193. A drug with prokinetic action:

Variants of answer:

- a) metoclopramide;
- b) castor oil;
- c) buckthorn bark decoction;
- d) lactulose;
- e) haloperidol.

194. A drug for hypoacid gastritis?

Variants of answer:

- a) cimetidine;
- b) atropine;
- c) pepsin;
- d) proserin;
- e) dehydrocholic acid.

195. H₂-receptor antagonist for increased gastric secretion:

Variants of answer:

- a) atropine;

- b) belladonna extract;
- c) methacine;
- d) pirenzepine;
- e) nizatidine.

196. An antacid agent:

Variants of answer:

- a) atropine;
- b) aluminum hydroxide;
- c) famotidine;
- d) pirenzepine;
- e) methacine.

197. An agent that neutralizes the action of hydrochloric acid in the stomach (systemic antacid):

Variants of answer:

- a) atropine;
- b) pirenzepine;
- c) sodium hydrogen carbonate;
- d) cimetidine;
- e) benzhexonium.

198. The main effect of famotidine:

Variants of answer:

- a) increased secretion of HCl in the stomach;
- b) decreased secretion of HCl in the stomach;
- c) decreased vascular tone;
- d) suppression of myometrium contractility;
- e) increased heart rate.

199. The main indication for use of H₂-antagonists:

Variants of answer:

- a) anaphylactic shock;
- b) delayed type hypersensitivity;
- c) bronchial asthma;
- d) itching, hives;
- e) stomach and duodenal ulcer.

200. A selective muscarinic antagonist used to decrease secretion of hydrochloric acid:

Variants of answer:

- a) famotidine;

- b) omeprazole;
- c) misoprostol;
- d) vicalin;
- e) telenzepine.

201. An antacid containing aluminum hydroxide and magnesium oxide:

Variants of answer:

- a) phosphalugel;
- b) sucralfate;
- c) maalox;
- d) almagel;
- e) de-nol.

202. Which gastroprotector is a derivative of prostaglandin E₁?

Variants of answer:

- a) solcoseryl;
- b) methyluracil;
- c) misoprostol;
- d) sucralfate;
- e) metoclopramide.

203. A drug for dissolving cholesterol gallstones in cholelithiasis:

Variants of answer:

- a) allochol;
- b) oxaphenamide;
- c) holosas;
- d) ursofalk;
- e) magnesium sulfate.

204. A substitute therapy drug used for pancreas function insufficiency:

Variants of answer:

- a) famotidine;
- b) atropine;
- c) pancreatin;
- d) loperamide;
- e) omeprazole.

205. A laxative agent for acute poisoning.

Variants of answer:

- a) senna preparations;
- b) rhubarb root powder;
- c) buckthorn bark extract;

- d) magnesium sulfate;
- e) vaseline oil.

206. A laxative:

Variants of answer:

- a) acetylidine;
- b) proserin;
- c) lactulose;
- d) reserpine;
- e) octadine.

207. A laxative effecting intestinal motility.

Variants of answer:

- a) atropine;
- b) proserin;
- c) bisacodyl;
- d) papaverine;
- e) acetylidine.

208. A drug that isn't a laxative.

Variants of answer:

- a) castor oil;
- b) phenolphthalein;
- c) odeston (hymecromon);
- d) lactulose;
- e) vaseline oil.

209. A mechanism of action of loperamide (imodium):

Variants of answer:

- a) effects nicotinic receptors;
- b) effects muscarinic receptors;
- c) effects α -adrenergic receptors;
- d) effects μ -opioid receptors;
- e) effects H₁-histamine receptors.

210. A spasmolytic with myotropic action used in intestinal colic.

Variants of answer:

- a) benzohexonium;
- b) atropine;
- c) drotaverin;
- d) scopolamine;
- e) methacine.

211. Identify a group of drugs. Have cardiotonic action. Reduce oxygen consumption per unit of work. Reduce venous congestion. Decrease edema. Are used for heart failure. In case of an overdose, prescribe potassium preparations and calcium ion binding agents.

Variants of answer:

- a) antianginal drugs;
- b) adrenergic agonists;
- c) methylxanthines (caffeine);
- d) cardiac glycosides;
- e) diuretics.

212. A cardiac glycoside:

Variants of answer:

- a) adrenaline;
- b) quinidine sulfate;
- c) caffeine;
- d) strophanthin;
- e) cordiamine.

213. The main effect of дигоксина.

Variants of answer:

- a) antianginal;
- b) cardiotonic;
- c) antihypertensive;
- d) hypertensive;
- e) analgesic.

214. The main indication for use of cardiac glycosides:

Variants of answer:

- a) coronary insufficiency;
- b) heart failure;
- c) vascular collapse;
- d) angina pectoris;
- e) blockade of the conduction system of the heart.

215. A cardiac glycoside with pronounced cumulative capacity.

Variants of answer:

- a) strophanthin;
- b) digitoxin;
- c) digoxin;
- d) clonidine;
- e) unitiol.

216. A cardiac glycoside with a short latent period of action.

Variants of answer:

- a) digitoxin;
- b) digoxin;
- c) strophanthin;
- d) quinidine sulfate;
- e) galantamine.

217. Signs of an overdose of cardiac glycosides:

Variants of answer:

- a) nausea;
- b) vomiting;
- c) bradycardia;
- d) AV-blockade;
- e) listed above in a), b), c), d) is true.

218. Drugs increasing toxicity of cardiac glycosides.

Variants of answer:

- a) potassium preparations;
- b) drugs binding calcium ions in the blood;
- c) saluretics;
- d) unitiol;
- e) potassium-sparing diuretics.

219. The mechanism of action of cardiac glycosides is associated with action on the enzyme:

Variants of answer:

- a) H^+ , K^+ -ATPase;
- b) phospholipase A_2 ;
- c) Na^+ , K^+ -ATPase ;
- d) cyclooxygenase-1;
- e) catechol-O-methyltransferase.

220. A drug that isn't cardiac glycosides?

Variants of answer:

- a) digitoxin;
- b) celanide;
- c) herb spring herrings infusion;
- d) thermopsis herb infusion;
- e) strophanthine K.

221. A non-glycoside cardiotoxic agents:

Variants of answer:

- a) strophanthin K;
- b) korglikon;
- c) celanide;
- d) dobutamine;
- e) digoxin.

222. A drug that isn't a non-glycoside cardiotoxic agent.

Variants of answer:

- a) dopamine;
- b) strophanthin;
- c) amrinone;
- d) milrinone;
- e) dobutamine.

223. An antiarrhythmic.

Variants of answer:

- a) sodium nitroprusside;
- b) amiodarone;
- c) iron lactate;
- d) ergometrine maleate;
- e) papaverine hydrochloride.

224. What is the effect of procainamide?

Variants of answer:

- a) antiarrhythmic;
- b) antianginal;
- c) cardiotonic;
- d) analgesic;
- e) hypertensive.

225. An antiarrhythmic drug from the group of anesthetics.

Variants of answer:

- a) quinidine sulfate;
- b) diphenine;
- c) cordarone;
- d) verapamil;
- e) lidocaine.

226. A drug to eliminating the atrioventricular blockage.

Variants of answer:

- a) strophanthin;

- b) anaprilin;
- c) verapamil;
- d) amiodarone;
- e) atropine.

227. A antiarrhythmic drug that is a calcium channel blocker.

Variants of answer:

- a) quinidine sulfate;
- b) lidocaine;
- c) anaprilin;
- d) cordaron;
- e) verapamil.

228. What drug is not used for tachyarrhythmias?

Variants of answer:

- a) novocainamide;
- b) lidocaine;
- c) atropine;
- d) amiodarone;
- e) verapamil.

229. Identify a group of drugs. Have an antianginal effect. Increase oxygen delivery to the heart and reduce the myocardial oxygen demand. Are used for coronary insufficiency.

Variants of answer:

- a) cardiac glycosides;
- b) β -blockers;
- c) β -agonists;
- d) nitrates;
- e) ganglionic blockers.

230. An antianginal agent.

Variants of answer:

- a) strophanthin;
- b) quinidine sulfate;
- c) caffeine;
- d) nitroglycerin;
- e) cordiamine.

231. The main effect of nitroglycerin.

Variants of answer:

- a) reduces myocardial oxygen demand;
- b) increases myocardial oxygen demand;

- c) has positive inotropic effect;
- d) increases blood pressure;
- e) decreases heart rate.

232. The main indication for nitrates use.

Variants of answer:

- a) coronary insufficiency;
- b) vascular collapse;
- c) paroxysmal tachycardia and extrasystole;
- d) pheochromocytoma;
- e) stomach lcer and duodenal ulcer.

233. An antianginal agent, organic nitrate with a longer duration of action than nitroglycerin.

Variants of answer:

- a) nitrosorbide;
- b) nifedipine
- c) sodium nitroprusside;
- d) dipyridamole;
- e) validol.

234. What is the side effect of nitroglycerin?.

Variants of answer:

- a) hypertension;
- b) bradycardia;
- c) myocardial ischemia;
- d) tachycardia;
- e) AV blockade.

235. A β -blocker for angina attack prevention.

Variants of answer:

- a) isosorbide dinitrate;
- b) nitration;
- c) metoprolol;
- d) dipyridamole;
- e) nifedipine.

236. Which drug isn't a nitrate?

Variants of answer:

- a) nitrosorbide;
- b) sustac;
- c) isosorbide mononitrate;
- d) validol;
- e) trinitrolong.

237. Which drug is not a calcium channel antagonist?

Variants of answer:

- a) verapamil;
- b) nifedipine;
- c) famotidine;
- d) cinnarizine;
- e) diltiazem.

238. What is the purpose of acetylsalicylic acid administration in angina pectoris?

Variants of answer:

- a) as an antipyretic;
- b) as an analgesic;
- c) for thrombolytic therapy;
- d) for anti-platelet therapy;
- e) reduction in myocardial oxygen demand.

239. What is the purpose of streptokinase administration in myocardial infarction?

Variants of answer:

- a) prevention of thrombosis;
- b) increased pumping function of the heart;
- c) thrombolysis;
- d) improvement of the collateral circulation;
- e) antiarrhythmic therapy.

240. A drug that isn't used for angina pectoris:

Variants of answer:

- a) isosorbide mononitrate;
- b) molsidomine;
- c) fenoterol (partusisten);
- d) atenolol;
- e) diltiazem.

241. A calcium channel blocker to improve cerebral circulation:

Variants of answer:

- a) nifedipine;
- b) diltiazem;
- c) verapamil;
- d) cinnarizine;
- e) ethosuximide.

242. Which drug, ergot derivative, is used for the treatment of migraine?

Variants of answer:

- a) colchicine;
- b) dihydroergotamine;
- c) picamylone;
- d) glycine;
- e) vinpocetine.

243. Identify a drug. Is used for arterial hypertension. Reduces cardiac output and systemic vascular resistance. Stimulates α -receptors, causes sedation.

Variants of answer:

- a) benzo hexonium;
- b) sodium nitroprusside;
- c) clonidine;
- d) anaprilin;
- e) prazosin.

244. A hypotensive drug.

Variants of answer:

- a) mezaton;
- b) naphthysine;
- c) clonidine;
- d) cordiamine;
- e) strophanthin.

245. What is the mechanism of action of captopril?

Variants of answer:

- a) blocks α -adrenergic receptors;
- b) blocks β -adrenergic receptors;
- c) blocks nicotinic receptors;
- d) enhances the formation of NO;
- d) inhibits angiotensin converting enzyme.

246. A drug that causes the longest hypotensive effect.

Variants of answer:

- a) nitroglycerin;
- b) sodium nitroprusside;
- c) hygronium;
- d) metoprolol;
- e) dibasol.

247. An antihypertensive drug that reduces the activity of the vasomotor centers.

Variants of answer:

- a) sodium nitroprusside;
- b) papaverine;
- c) octadine;
- d) benzohexonium;
- e) clonidine.

248. An antihypertensive drug from the group of ganglionic blockers.

Variants of answer:

- a) methyldopa;
- b) benzohexonium;
- c) reserpine;
- d) prazosin;
- e) apresin.

249. A hypotensive agent that influences water-electrolyte metabolism.

Variants of answer:

- a) clonidine;
- b) benzohexonium;
- c) anaprilin;
- d) dichlorothiazide;
- e) magnesium sulfate.

250. A β -blocker.

Variants of answer:

- a) clonidine;
- b) benzohexonium;
- c) octadine;
- d) anaprilin;
- e) prazosin.

251. An antihypertensive agent – angiotensin converting enzyme inhibitor.

Variants of answer:

- a) captopril;
- b) anaprilin;
- c) dichlorothiazide;
- d) apresin;
- e) benzohexonium.

252. An antihypertensive drug causing hypokalemia.

Variants of answer:

- a) clonidine;
- b) benzohexonium;

- c) hydrochlorothiazide;
- d) propranolol;
- e) apressin.

253. An ACE inhibitor.

Variants of answer:

- a) atenolol;
- b) lisinopril;
- c) nifedipine;
- d) clonidine;
- e) phenamine.

254. What is the contraindication for the use of ACE inhibitors:

Variants of answer:

- a) hypertension;
- b) angina pectoris;
- c) diabetes mellitus;
- d) renal artery stenosis;
- e) Raynaud's disease.

255. A drug that isn't used in hypertensive crisis is not used:

Variants of answer:

- a) furosemide;
- b) clonidine;
- c) mesaton;
- d) anaprilin;
- e) captopril.

256. Identify a drug. It has a diuretic and hypotensive effect. It decreases reabsorption of sodium ions and water in the kidneys. Increases excretion of potassium ions. Acts rapidly, strongly and for a short time.

Variants of answer:

- a) spironolactone;
- b) triamterene;
- c) hydrochlorothiazide;
- d) furosemide;
- e) oxodolidine.

257. What diuretic is used for forced diuresis in acute drug poisoning?

Variants of answer:

- a) diacarb;
- b) hydrochlorothiazide;

- c) furosemide;
- d) spironolactone;
- e) triamterene.

258. A diuretic:

Variants of answer:

- a) dehydrocholic acid;
- b) ethacrynic acid;
- c) acetylsalicylic acid;
- d) nalidixic acid;
- e) boric acid.

259. What is the mechanism of action of hydrochlorothiazide?

Variants of answer:

- a) inhibits carbonic anhydrase;
- b) blocks aldosterone receptors;
- c) blocks vasopressin receptors;
- d) inhibits Na⁺ и Cl⁻ reabsorption in the distal and proximal tubules;
- e) enhances filtration in the renal glomeruli.

260. What is the main effect of furosemide?

Variants of answer:

- a) increased vascular tone;
- b) increased tone of the uterus;
- c) increased diuresis;
- d) increased blood pressure;
- e) increased intraocular pressure.

261. Indicate a diuretic agent - aldosterone antagonist.

Variants of answer:

- a) furosemide;
- b) hydrochlorothiazide;
- c) ethacrynic acid;
- d) mannitol;
- e) spironolactone.

262. A diuretic that acts rapidly, strongly and shortly.

Variants of answer:

- a) oxodoline;
- b) gignonium;
- c) hydrochlorothiazide;
- d) spironolactone;
- e) furosemide.

263. A potassium-sparing diuretic that does not affect the action of aldosterone.

Variants of answer:

- a) furosemide;
- b) hydrochlorothiazide;
- c) mannitol;
- d) triamterene;
- e) spironolactone.

264. A drug that prevents the development of hypokalemia induced by saluretics.

Variants of answer:

- a) deoxycorticosterone acetate;
- b) prednisolone;
- c) spironolactone;
- d) digitoxin;
- e) quinidine.

265. The weakest diuretic.

Variants of answer:

- a) furosemide;
- b) ethacrynic acid;
- c) hydrochlorothiazide;
- d) mannitol;
- e) acetazolamide.

266. A side effect of a potassium-sparing diuretic spironolactone.

Variants of answer:

- a) hypertension;
- b) gynecomastia;
- c) hypokalemia;
- d) ulcerogenic effect;
- e) hypovitaminosis B₆.

267. A method of prophylaxis of hypokalemia during the use of potent diuretics:

Variants of answer:

- a) use of Asparcam;
- b) use of spironolactone;
- c) the use of dried apricots, raisins, baked potatoes;
- d) none of the above;
- e) all of the above.

268. Identify a drug. Increases uterine contractility. Increase mainly rhythmic activity. The effectiveness depends on the presence and duration of pregnancy. Is used for poor uterine contraction strength. Is ineffective orally due to destruction in the digestive tract.

Variants of answer:

- a) proserin;
- b) benzohexonium;
- c) ergometrine;
- d) dinoprost;
- e) oxytocin.

269. A drug that increases the tone of the uterus.

Variants of answer:

- a) hydrochlorothiazide;
- b) neodicoumarin;
- c) hexoprenaline;
- d) oxytocin;
- e) furosemide.

270. What is the main effect of oxytocin?

Variants of answer:

- a) reduction of blood sugar;
- b) increased diuresis;
- c) increase in uterine contraction;
- d) decrease in uterine contraction;

271. A tocomimetic drug, analogue of prostaglandin E₂

Variants of answer:

- a) dinoprostone;
- b) oxytocin;
- c) pituitrin;
- d) cotarnin;
- e) ergometrine.

272. Which drug increases predominantly contractile activity of the uterus?

Variants of answer:

- a) fenoterol;
- b) oxytocin;
- c) ergotamine;
- d) cotarnin;
- e) magnesium sulfate.

273. What is the name of ergot intoxication?

Variants of answer:

- a) cinchonism;

- b) parkinsonism;
- c) salicylism;
- d) ergotism;

274. Blood coagulation agents include:

Variants of answer:

- a) heparin;
- b) neodicoumarin;
- c) vikassol;
- d) fibrinolysin;
- e) acetylsalicylic acid.

275. The main effect of vikasol.

Variants of answer:

- a) increased vascular wall permeability;
- b) lowers the permeability of the vascular wall;
- c) increased blood clotting;
- d) reduction of blood clotting;
- e) increased fibrinolysis.

276. What is the main effect of aminocaproic acid?

Variants of answer:

- a) reduction of blood clotting;
- b) increased fibrinolysis;
- c) inhibition of fibrinolysis;
- d) increased diuresis;
- e) increased erythropoiesis.

277. A fibrinolysis inhibitor:

Variants of answer:

- a) ethacrynic acid;
- b) lipoic acid;
- c) gamma-aminobutyric acid;
- d) aminocaproic acid;
- e) ursodeoxycholic acid.

278. An anti-clotting agent:

Variants of answer:

- a) vikasol;
- b) thrombin;
- c) fibrinogen;
- d) warfarin;
- e) aminocaproic acid.

279. An antiplatelet drug.

Variants of answer:

- a) vikasol;
- b) fibrinogen;
- c) thrombin;
- d) aminocaproic acid;
- e) acetylsalicylic acid.

280. What is the main effect of warfarin?

Variants of answer:

- a) stimulation of erythropoiesis;
- b) stimulation of leukopoiesis;
- c) stimulation of blood clotting;
- d) stimulation of fibrinolysis;
- e) reduction of blood coagulation.

281. A low molecular weight heparin:

Variants of answer:

- a) phenylin;
- b) neodicoumarin;
- c) heparin;
- d) protamine sulfate;
- e) nadroparin.

282. Identify a drug. Delays blood clotting in vitro and in vivo. The antagonist is protamine sulfate.

Variants of answer:

- a) fibrinolysin;
- b) streptokinase;
- c) neodicoumarin;
- d) heparin;
- e) acetylsalicylic acid.

283. A direct anticoagulant.

Variants of answer:

- a) acetylsalicylic acid;
- b) warfarin;
- c) heparin;
- d) aminocaproic acid;
- e) fibrinolysin.

284. A drug for indirect anticoagulant overdose.

Variants of answer:

- a) protamine sulfate;
- b) sodium citrate;
- c) sodium thiosulfate;

- d) vikalol;
- e) cholinesterase reactivator.

285. Which of the following is used to dissolve fresh trombi?

Variants of answer:

- a) streptokinase
- b) thrombin;
- c) fibrinogen;
- d) heparin;
- e) acetylsalicylic acid.

286. A selective trombolitic of the II generation:

Variants of answer:

- a) streptokinase;
- b) alteplase;
- c) urokinase;
- d) fibrinolysin;
- e) all answer are incorrect.

287. What is the contraindication for the use of streptokinase:

Variants of answer:

- a) allergic reaction;
- b) suspected acute dissecting aortic aneurysm;
- c) streptococcal infection;
- d) hemophilia;
- e) all of the above.

288. Iron lactate causes:

Variants of answer:

- a) stimulation of leukopoiesis;
- b) suppression of leukopoiesis;
- c) stimulation of erythropoiesis;
- d) suppression of erythropoiesis;
- e) suppression of hemopoiesis.

289. A drug for the treatment of hypochromic anemia?

Variants of answer:

- a) iron sulfate;
- b) folic acid;
- c) aminocaproic acid;
- d) ethacrynic acid;
- e) cyanocobalamin.

290. A drug for the treatment of hyperchromic anemia.

Variants of answer:

- a) fercovene;

- b) cyanocobalamin;
- c) pentoxyl;
- d) iron lactate;
- e) ascorbic acid.

291. A drug for B₁₂ deficiency anemia:

Variants of answer:

- a) ergocalciferol;
- b) cyanocobalamin;
- c) fercovene;
- d) pentoxyl;
- e) "Hematogen».

292. An antidote for overdose of iron preparations is:

Variants of answer:

- a) deferoxamine;
- b) protamine sulfate;
- c) flumazenil;
- d) naloxone;
- e) acetylcysteine.

293. What drug is not used for hypochromic iron deficiency anemia??

Variants of answer:

- a) fercovene;
- b) cyanocobalamin;
- c) ferrum lek;
- d) ferroplex;
- e) haemophore.

294. An erythropoiesis stimulating agent:

Variants of answer:

- a) epoetin alfa;
- b) dehydrocholic acid;
- c) ethacrylic acid;
- d) methotrexate;
- e) mercaptopurine.

295. A leukopoiesis stimulating agent:

Variants of answer:

- a) fercovene;
- b) molgramostin;
- c) methotrexate;
- d) mercaptopurine;
- e) levomycetin.

IV. HORMONAL DRUGS. DRUGS THAT AFFECT METABOLISM, INFLAMMATION AND IMMUNITY

Choose one correct answer

296. A drug with the activity of hormones of the hypophysis posterior lobe:

Variants of answer:

- a) corticotropin;
- b) somatotropin;
- c) thyroidin;
- d) oxytocin;
- e) parathyroidin.

297. A drug for hypothyroidism:

Variants of answer:

- a) thyroxine;
- b) insulin;
- c) prednisolone;
- d) dinoprost;
- e) vasopressin.

298. A drug for hyperthyroidism:

Variants of answer:

- a) lyotyronin;
- b) parathyroidin;
- c) β -blockers;
- d) thyroxine;
- e) all answer are incorrect.

299. Indication for the use of thyroxin:

Variants of answer:

- a) diabetes mellitus;
- b) thyrotoxicosis;
- c) Addison's disease;
- d) acromegaly;
- e) myxedema.

300. An antithyroid agent:

Variants of answer:

- a) oxytocin;
- b) adiureccrin;
- c) thyroxine;

- d) triiodothyronine;
- e) thiamazole.

301. Identify a drug. Has hypoglycemic action. Promotes the penetration of glucose into cells and its utilization. Oral administration is ineffective.

Variants of answer:

- a) metformin;
- b) glibenclamide;
- c) glucagon;
- d) adrenaline;
- e) insulin.

302. An oral hypoglycemic agent:

Variants of answer:

- a) repaglinide;
- b) pioglitazone;
- c) glibenclamide;
- d) metformin;
- e) all answer are correct.

303. Deoxycorticosterone acetate causes:

Variants of answer:

- a) increase in blood glucose;
- b) lowering of blood glucose level;
- c) delay of sodium in the body;
- d) sodium removal from the body;
- e) an anti-inflammatory effect.

304. A drug with activity of glucocorticoid hormones:

Variants of answer:

- a) deoxycorticosterone acetate (DOCA);
- b) oxyprogesterone caproate;
- c) testosterone propionate;
- d) flumethasone pivalate;
- e) epinephrine hydrochloride.

305. One of the main indications for the use of glucocorticoids.

Variants of answer:

- a) diabetes mellitus;
- b) diabetes insipidus;
- c) cachexia;
- d) infertility;
- e) autoimmune diseases.

306. Identify a hormonal agent. Has anti-inflammatory, anti-allergic, immunosuppressive effect. Increases the level of glucose in the blood. Stimulates the breakdown of proteins in the muscles. Causes redistribution of adipose tissue in the body.

Variants of answer:

- a) adrenaline;
- b) deoxycorticosterone acetate;
- c) testosterone propionate;
- d) phenoboline;
- e) prednisolone.

307. What side effect is not characteristic for the systemic use of glucocorticoids?

Variants of answer:

- a) hypertension;
- b) ulceration of the gastric mucosa;
- c) psychosis;
- d) hypoglycaemia;
- e) violation of fat distribution.

308. What is the mechanism of anti-inflammatory action of glucocorticoids?

Variants of answer:

- a) activate cyclooxygenase;
- b) inhibit the phospholipase A₂;
- c) inhibit monoamine oxidase;
- d) inhibit catechol-O-methyltransferase;
- e) inhibit α -glycosidase.

309. Indication for the use of estrogens.

Variants of answer:

- a) to suppress the contractile activity of the myometrium during labor;
- b) primary ovarian insufficiency;
- c) breast cancer in women of childbearing age;
- d) uterine bleeding;
- e) corpus luteum insufficiency.

310. A drug with estrogenic activity.

Variants of answer:

- a) testosterone;
- b) phenabolin;
- c) ethinylestradiol;
- d) progesterone;
- e) pregnin.

311. A gestagenic preparation in tablets.

Variants of answer:

- a) dydrogesterone;
- b) synestrol;
- c) methyltestosterone;
- d) methandrostenolone;
- e) oxyprogesterone caproate.

312. An anabolic steroid:

Variants of answer:

- a) hydroxyprogesterone capronate;
- b) flumethasone pivalate;
- c) retabolil;
- d) hydrocortisone;
- e) deoxycorticosterone acetate.

313. Ascorbic acid causes:

Variants of answer:

- a) increase in bone tissue mineralization;
- b) reduction of bone tissue mineralization;
- c) increased vascular permeability;
- d) reduction of vascular permeability;
- e) reduction of erythropoiesis.

314. The main indication for the administration of ascorbic acid is:

Variants of answer:

- a) prevention and treatment of beriberi;
- b) prevention and treatment of pellagra;
- c) prevention and treatment of scurvy;
- d) prevention and treatment of pernicious anemia;
- e) prevention and treatment of rickets.

315. The main indication for the administration of cyanocobalamin is:

Variants of answer:

- a) beriberi;
- b) pellagra;
- c) scurvy (scurvy);
- d) pernicious anemia;
- e) rickets.

316. Indications for use of nicotine acid.

Variants of answer:

- a) pernicious anemia;

- b) bleeding due to hypothrombinemia;
- c) hemostalopia;
- d) pellagra;
- e) scurvy.

317. Thiamine is a vitamin:

Variants of answer:

- a) B₁;
- b) B₂;
- c) B₆;
- d) P;
- e) PP.

318. Riboflavin is a vitamin:

Variants of answer:

- a) B₁;
- b) B₂;
- c) B₆;
- d) P;
- e) PP.

319. The nicotinic acid is a vitamin:

Variants of answer:

- a) B₁;
- b) B₂;
- c) B₆;
- d) P;
- e) PP.

320. Pyridoxine is a vitamin:

Variants of answer:

- a) B₁;
- b) B₂;
- c) B₆;
- d) P;
- e) PP.

321. Fat-soluble vitamin:

Variants of answer:

- a) thiamine chloride;
- b) cyanocobalamin;
- c) riboflavin;
- d) ergocalciferol;
- e) rutin.

322. The main indication for the use of ergocalciferol.

Variants of answer:

- a) pernicious anemia;
- b) polyneuritis, paralysis;
- c) hemostalopia;
- d) bleeding;
- e) rickets, osteomalacia, osteoporosis.

323. The main indication for prescribing retinol.

Variants of answer:

- a) hemostalopia;
- b) pellagra;
- c) rickets;
- d) scurvy;
- e) intoxication with isonicotinic acid hydrazides.

324. Tocopherol is a vitamin:

Variants of answer:

- a) D;
- b) A;
- c) E;
- d) C;
- e) P.

325. A vitamin for prevention of rickets:

Variants of answer:

- a) ergocalciferol;
- b) retinol;
- c) tocopherol;
- d) riboflavin;
- e) rutin.

326. A selective COX-2 inhibitor:

Variants of answer:

- a) orthophene;
- b) ibuprofen;
- c) naproxen;
- d) meloxicam;
- e) ketorol.

327. An antihistamine with a hypnotic effect.

Variants of answer:

- a) cimetidine;

- b) ranitidine;
- c) diphenhydramine;
- d) diazolin;
- e) histaglobulin.

328. An immunostimulant which is a synthetic interferon inducer:

Variants of answer:

- a) levamisole;
- b) thymalin;
- c) intron A;
- d) betaferon;
- e) cycloferon.

329. An immunomodulator used as an anthelmintic agent:

Variants of answer:

- a) tactivin;
- b) thymalin;
- c) prodigiosan;
- d) levamisole;
- e) splenin.

330. Which drug isn't a H₁-antagonist?

Variants of answer:

- a) diphenhydramine;
- b) fenkarol;
- c) suprastin;
- d) ranitidine;
- e) loratidine.

331. An antihistamine drug that does not have a sedative effect:

Variants of answer:

- a) suprastin;
- b) diphenhydramine;
- c) diazoline;
- d) diprazine;
- e) tavegil.

V. CHEMOTHERAPEUTIC AGENTS

Choose one correct answer

332. An antiseptic:

Variants of answer:

- a) Benzylpenicillin-sodium salt;
- b) sulfadimezine;
- c) isoniazid;
- d) furacilin;
- e) metronidazole.

333. An antiseptic from the group of oxidants.

Variants of answer:

- a) silver nitrate;
- b) potassium permanganate;
- c) furacilin;
- d) phenol;
- e) ethyl alcohol.

334. Specify an antiseptic from the group of dyes, used for the treatment of pustular skin diseases.

Variants of answer:

- a) chloramine B;
- b) phenol;
- c) furacilin;
- d) brilliant green;
- e) solution of iodine alcohol.

335. Concentration of ethanol for skin preparation:

Variants of answer:

- a) 30 %;
- b) 40 %;
- c) 70 %;
- d) 100 %;
- e) 96 %.

336. Identify a group of antibiotics. They act primarily on gram-positive flora. The mechanism of antimicrobial action is associated with a violation of the formation of the bacterial wall, which leads to the death of young and growing forms of microorganisms. The main side effect is allergic reactions.

Variants of answer:

- a) tetracyclines;

- b) macrolides;
- c) levomycetins;
- d) aminoglycosides;
- e) penicillins.

337. An antibiotic from the penicillin group:

Variants of answer:

- a) neomycin sulfate;
- b) doxycycline hydrochloride;
- c) erythromycin;
- d) cephaloridine;
- e) amoxicillin.

338. Indicate the mechanism of action of benzylpenicillin.

Variants of answer:

- a) inhibits synthesis of folic acid;
- b) inhibits conversion of folic acid to tetrahydrofolic acid;
- c) inhibits transpeptidase and disrupts the synthesis of murein;
- d) inhibits protein synthesis, disrupting the attachment of tRNA to the ribosome;
- e) disrupts the function of the pyruvate kinase complex of microbes.

339. A broad-spectrum antibiotic from the group of semisynthetic penicillins.

Variants of answer:

- a) benzylpenicillin sodium salt;
- b) bicillin-5;
- c) oxacillin;
- d) amoxicillin;
- e) doxycycline.

340. A penicillin antibiotic resistant to the action of penicillinase.

Variants of answer:

- a) benzylpenicillin sodium salt;
- b) bicillin-5;
- c) oxacillin;
- d) ampicillin;
- e) benzylpenicillin novocaine salt.

341. Antibiotics of the penicillin group most often cause:

Variants of answer:

- a) liver dysfunction;
- b) kidney dysfunction;
- c) hearing impairment and vestibular disorders;

- d) allergic reactions;
- e) inhibition of hematopoiesis.

342. A combined penicillin:

Variants of answer:

- a) benzylpenicillin;
- b) bicillin-1;
- c) ampicillin;
- d) amoxiclav;
- e) oxacillin.

343. Bactericidal antibiotics that violate the synthesis of the cell wall:

Variants of answer:

- a) aminoglycosides;
- b) tetracyclines;
- c) cephalosporins;
- d) macrolides;
- e) all answer are correct.

344. What will happen after intravenous administration of bicillin:

Variants of answer:

- a) auditory nerve damage;
- b) limb gangrene;
- c) bones and teeth damage;
- d) disruption of the cartilaginous tissue formation;
- e) agranulocytosis.

345. A bactericidal drug:

Variants of answer:

- a) tetracycline;
- b) sulfadimezine;
- c) para-aminosalicylic acid;
- d) sulfadimethoxin;
- e) amoxicillin.

346. β -lactam antibiotics:

Variants of answer:

- a) cephalosporins;
- b) tetracyclines;
- c) lincosamides;
- d) macrolides;
- e) aminoglycosides.

347. The fourth generation cephalosporin:

Variants of answer:

- a) cefazolin;
- b) ceftriaxone (rocephin);
- c) cefuroxime (zinacef);
- d) cefotaxime;
- e) cefepime (maximize)

348. The combination drug from the group of carbapenems (imipenem + cilastatin) is:

Variants of answer:

- a) augmentin;
- b) ampiox;
- c) thienam;
- d) biseptol;
- e) unazine.

349. A macrolide:

Variants of answer:

- a) bicillin-5;
- b) rifampicin;
- c) ampicillin;
- d) azithromycin;
- e) polymyxin.

350. A macrolide for *Helicobacter pylori* eradication:

Variants of answer:

- a) benzylpenicillin;
- b) oxacillin;
- c) polymyxin;
- d) levomycetin;
- e) clarithromycin.

351. Identify a group of antibiotics. They have a broad spectrum of antimicrobial action. They act bacteriostatically. Suppress the synthesis of protein in a microbial cell. Increase the sensitivity of the skin to ultraviolet radiation, are deposited in the bones.

Variants of answer:

- a) penicillins;
- b) macrolides;
- c) cephalosporins;
- d) tetracyclines;
- e) aminoglycosides.

352. A mechanism of action of tetracycline.

Variants of answer:

- a) inhibits folic acid synthesis;
- b) synthesis cellular murein synthesis;
- c) synthesis nucleic acids synthesis;
- d) violates protein synthesis by prevention of formation of a complex of trans-RNA with information RNA on ribosomes;
- e) violates protein synthesis by blocking the enzyme translocase.

353. A long-acting tetracycline.

Variants of answer:

- a) ampicillin;
- b) cephaloridine;
- c) doxycycline;
- d) rifampicin;
- e) erythromycin.

354. A bacteriostatic antibiotic:

Variants of answer:

- a) doxycycline;
- b) ceftriaxone;
- c) benzylpenicillin;
- d) amikacin;
- e) all options are incorrect.

355. Indicate the side effects of aminoglycosides:

Variants of answer:

- a) nephrotoxicity;
- b) ototoxicity;
- c) curariform effect;
- d) damage of the vestibular branch of the VIII pair of cranial nerves;
- e) all of the above is true.

356. Indicate a group of antibiotics other than β -lactam antibiotics:

Variants of answer:

- a) penicillins;
- b) aminoglycosides;
- c) cephalosporins;
- d) monobactams;
- e) carbapenems.

357. A drug impairing growth of tubular bones and development of enamel in children:

Variants of answer:

- a) amoxicillin;
- b) tetracycline;
- c) cefuroxime;
- d) clarithromycin;
- e) tobramycin.

358. A fluoroquinolone:

Variants of answer:

- a) nalidixic acid;
- b) ciprofloxacin;
- c) linezolid;
- d) fluorouracil;
- e) chloramphenicol.

359. An aminoglycoside:

Variants of answer:

- a) tetracycline;
- b) erythromycin;
- c) rifampicin;
- d) oxacillin;
- e) amikacin.

360. An aminoglycoside used to sanitize the intestine before surgery.

Variants of answer:

- a) erythromycin;
- b) neomycin;
- c) griseofulvin;
- d) metacycline;
- e) oxacillin.

361. What is the mechanism of action of rifampicin?

Variants of answer:

- a) inhibits folic acid synthesis;
- b) inhibits bacterial murein synthesis;
- c) inhibits nucleic acids synthesis;
- d) causes disintegration of the membrane;
- e) inhibits the synthesis of protein, preventing the formation of a complex of transport RNA with information RNA on ribosomes.

362. A nitrofuran:

Variants of answer:

- a) nitroglycerin;
- b) ofloxacin;
- c) metronidazole;
- d) nitrofurantoin;
- e) nitroxoline.

363. Which of the antibiotics cause impairment of the functions of the VIII pair of cranial nerves?

Variants of answer:

- a) levomycetin;
- b) tetracyclines;
- c) aminoglycosides;
- d) macrolides;
- e) penicillins.

364. Identify a group of chemotherapeutic agents. They act on Gram-positive and Gram-negative microbes. The mechanism of antimicrobial action is associated with antagonism with paraaminobenzoic acid (PABA). Cause crystalluria.

Variants of answer:

- a) nitrofurans;
- b) 8-hydroxyquinoline derivatives;
- c) naphthyridine derivatives;
- d) sulfonamide preparations;
- e) quinoxaline derivatives.

365. A sulfonamide.

Variants of answer:

- a) fluconazole;
- b) metronidazole;
- c) oxacillin;
- d) sulfadimezine;
- e) isoniazid.

366. What is the mechanism of action of sulfadimezine?

Variants of answer:

- a) disrupts the formation of folic acid by microbial cells;
- b) inhibits folate reductase and makes it difficult to form tetrahydrofolic acid;
- c) inhibits enzyme transpeptidase and inhibits murein synthesis;
- d) inhibits DNA-dependent RNA polymerase;
- e) violates the correct reading of the genetic code.

367. Furazolidone is used for:

Variants of answer:

- a) herpes simplex;
- b) intestinal infection;
- c) pyoderma;
- d) otitis;
- e) pneumonia.

368. Drugs of choice for the treatment of syphilis:

Variants of answer:

- a) penicillin;
- b) aminoglycosides;
- c) sulfonamides;
- d) nitroimidazoles;
- e) macrolides.

369. Indicate the antibiotic used as eye drops:

Variants of answer:

- a) amoxicillin;
- b) azithromycin;
- c) remantadine;
- d) tobramycin;
- e) cefuroxime.

370. A sulfanilamide preparation containing sulfonamide and trimethoprim.

Variants of answer:

- a) sulfadimezine;
- b) sulfapyridazine;
- c) phthalazole;
- d) sodium sulfacil;
- e) co-trimoxazole (bactrim).

371. Sulfanilamides can cause:

Variants of answer:

- a) visual impairment;
- b) psychoses;
- c) paralysis and paresis;
- d) crystalluria;
- e) vestibular disorders.

372. Mark a substance that weakens the anti-microbial effect of sulfanilamides.

Variants of answer:

- a) novocaine;
- b) benzylpenicillin;
- c) trimethoprim;
- d) rifampicin;
- e) methotrexate.

373. Which antimicrobial agents are included in the composition of cotrimoxazole (bactrim, biseptol, septrin)?

Variants of answer:

- a) oxacillin and ampicillin;
- b) amoxicillin and clavulanic acid;
- c) imipinem and cilastatin;
- d) sulfamethoxazole and trimethoprim;
- e) isoniazid and rifampicin.

374. Which antimicrobial agent is inactive against *Helicobacter pylori*?

Variants of answer:

- a) amoxicillin;
- b) clarithromycin;
- c) streptomycin;
- d) metronidazole;
- e) tetracycline.

375. The mechanism of action of isoniazid:

Variants of answer:

- a) interferes with the synthesis of folic acid;
- b) inhibits transpeptidase and disrupts bacterial wall synthesis;
- c) inhibits DNA-gyrase;
- d) interferes with protein synthesis;
- e) disturbs the synthesis of mycolic acids.

376. A synthetic antituberculous agent is:

Variants of answer:

- a) streptomycin;
- b) rifampicin;
- c) kanamycin;
- d) pyrazinamide;
- e) all answer are correct.

377. An antituberculous agent:

Variants of answer:

- a) isoniazid;
- b) urosulfan;
- c) hingamine;
- d) tinidazole;
- e) oxoline.

378. Specify a broad-spectrum antibiotic for the treatment of tuberculosis, effective when administered orally.

Variants of answer:

- a) streptomycin;
- b) rifampicin;
- c) ampicillin;
- d) isoniazid;
- e) para-aminosalicylic acid (PASA).

379. Vancomycin and teicoplanin belong to the group of:

Variants of answer:

- a) lincosamides;
- b) oxazolidinones;
- c) amphenicols;
- d) monobactams;
- e) glycopeptides.

380. What will happen after intravenous administration of bicillin:

Variants of answer:

- a) auditory nerve damage;
- b) limb gangrene;
- c) bones and teeth damage;
- d) disruption of the cartilaginous tissue formation;
- e) agranulocytosis.

381. An antifungal antibiotic:

Variants of answer:

- a) benzylpenicillin-sodium salt;
- b) tetracycline;
- c) neomycin sulfate;
- d) amphotericin B;
- e) polymyxin M.

382. Indicate the drug for treatment of mucous candidiasis.

Variants of answer:

- a) amphotericin B;
- b) griseofulvin;
- c) fluconazole;
- d) azithromycin;
- e) streptomycin.

383. An antiviral drug:

Variants of answer:

- a) amphotericin B;
- b) quinine sulfate;
- c) ozeltamivir;
- d) arbidol;
- e) isoniazid.

384. Combination therapy is one of the principles for tuberculosis treatment because:

Variants of answer:

- a) there is less chance of side effects;
- b) the half-life of each drug is increased;
- c) it prevents resistance of the mycobacterium;
- d) the course of treatment is significantly reduced;
- e) the likelihood of other bacterial infections decreases.

385. A drug with the broadest spectrum of antiviral activity.

Variants of answer:

- a) metisazone;
- b) midantane;
- c) oxolin;
- d) idoxuridine;
- e) interferon.

386. Which drug with antiviral activity can be used as an antiparkinsonian agent?

Variants of answer:

- a) zidovudine;
- b) amantadine;
- c) arbidol;
- d) cycloferon;
- e) acyclovir.

387. A drug of choice for the treatment of cytomegalovirus infection:

Variants of answer:

- a) interferon;
- b) oseltamivir;
- c) ribavirin;
- d) ganciclovir;
- e) zidovudine.

388. A drug for the treatment of herpes infection:

Variants of answer:

- a) metisazone;
- b) acyclovir;
- c) arbidol;
- d) remantadine;
- e) zidovudine.

389. Identify a drug. It is used to treat malaria. It acts on erythrocyte forms of plasmodium. It is an alkaloid of the cinchona bark.

Variants of answer:

- a) chloridine;
- b) hingamine;
- c) acrichine;
- d) quinine;
- e) primaquine.

390. An antimalarial agent:

Variants of answer:

- a) ampicillin;
- b) metronidazole;
- c) quinine sulfate;
- d) furazolidone;
- e) ciprofloxacin.

391. An antimalarial agent.

Variants of answer:

- a) hingamine;
- b) metronidazole;
- c) enteroseptol;
- d) furazolidone;
- e) piperazine adipate.

392. Identify a chemotherapeutic agent. The spectrum of action: dysenteric amoeba, Trichomonas, lamblia. Effective in all forms of amoebiasis. Causes aversion to alcohol.

Variants of answer:

- a) metronidazole;
- b) oxoline;
- c) hingamine;
- d) oxacillin;
- e) isoniazid.

393. An agent effective in all forms of amoebiasis.

Variants of answer:

- a) metronidazole;
- b) tetracycline;
- c) hingamine;
- d) sulfadimezine;
- e) isoniazid.

394. A drug for trichomoniasis.

Variants of answer:

- a) hingamine;
- b) ethambutol;
- c) sulfadimezine;
- d) metronidazole;
- e) furacilin.

395. A drug for the treatment of chlamydial infection:

Variants of answer:

- a) gentamicin;
- b) amoxicillin;
- c) azithromycin;
- d) cefazolin;
- e) furazolidone.

396. An inhibitor of bacterial β -lactamase is:

Variants of answer:

- a) clavulanic acid;
- b) nalidixic acid;
- c) fusidic acid;
- d) cromoglycic acid;
- e) aminocaproic acid.

397. The drug of choice for intestinal nematodes:

Variants of answer:

- a) ribavirin;
- b) niclosamide;
- c) metronidazole;
- d) praziquantel;
- e) mebendazole.

398. Identify a drug. Oppresses oxidative phosphorylation in cestodes and paralyzes them. Reduces the resistance of helminths to proteolytic enzymes of the digestive tract. It is not recommended in case of teniasis due to the risk of cysticercosis.

Variants of answer:

- a) levamisole;
- b) pyrantel pamoate;
- c) fenasal;
- d) piperazine adipate;
- e) mebendazole.

399. Identify the antitumor agent. An antimetabolite. Suppress the activity of folate reductase. It is used for acute leukemia.

Variants of answer:

- a) sarcolysin;
- b) colchamine;
- c) mercaptopurine;
- d) methotrexate;
- e) fluorouracil.

400. An antitumor drug:

Variants of answer:

- a) methotrexate;
- b) pentoxyl;
- c) ferkovene;
- d) piperazine adipate;
- e) quinine sulfate.

ANSWERS

I. GENERAL PHARMACOLOGY

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
1	d	10	e	19	d	28	c
2	d	11	a	20	a	29	e
3	b	12	d	21	b	30	e
4	d	13	a	22	b	31	d
5	a	14	e	23	e	32	b
6	e	15	a	24	a	33	e
7	c	16	c	25	d		
8	e	17	b	26	d		
9	d	18	e	27	e		

II. NEUROTROPIC DRUGS

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
34	a	68	b	102	a	136	d
35	e	69	e	103	d	137	b
36	c	70	c	104	b	138	c
37	d	71	c	105	c	139	d
38	c	72	d	106	a	140	d
39	a	73	c	107	a	141	c
40	e	74	c	108	e	142	c
41	a	75	c	109	e	143	a
42	b	76	c	110	b	144	e
43	d	77	d	111	d	145	b
44	d	78	a	112	d	146	d
45	c	79	c	113	a	147	d
46	b	80	a	114	b	148	c
47	e	81	a	115	c	149	d
48	c	82	c	116	a	150	d
49	c	83	c	117	d	151	d
50	b	84	b	118	d	152	c
51	b	85	d	119	e	153	d
52	c	86	e	120	e	154	b
53	c	87	b	121	c	155	c
54	b	88	d	122	e	156	c
55	d	89	c	123	e	157	c
56	e	90	c	124	c	158	e
57	e	91	c	125	e	159	b
58	d	92	c	126	b	160	d
59	e	93	b	127	b	161	b
60	d	94	c	128	d	162	a
61	a	95	d	129	c	163	c
62	d	96	a	130	c	164	b
63	a	97	c	131	d	165	a
64	e	98	c	132	d	166	e
65	c	99	e	133	c	167	d
66	c	100	b	134	e	168	b
67	d	101	b	135	d		

III. DRUGS AFFECTING ORGAN'S FUNCTIONS

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
169	b	201	d	233	a	265	e
170	e	202	c	234	d	266	b
171	b	203	d	235	c	267	e
172	b	204	c	236	d	268	e
173	c	205	d	237	c	269	d
174	c	206	c	238	d	270	c
175	a	207	c	239	c	271	a
176	d	208	c	240	c	272	b
177	c	209	d	241	d	273	d
178	d	210	c	242	b	274	c
179	c	211	d	243	c	275	c
180	d	212	d	244	c	276	c
181	a	213	b	245	e	277	d
182	d	214	b	246	e	278	d
183	c	215	b	247	e	279	e
184	b	216	c	248	b	280	e
185	d	217	e	249	d	281	e
186	d	218	c	250	d	282	d
187	b	219	c	251	a	283	c
188	b	220	d	252	c	284	d
189	a	221	d	253	b	285	a
190	a	222	b	254	d	286	b
191	c	223	b	255	c	287	e
192	c	224	a	256	d	288	c
193	a	225	e	257	c	289	a
194	c	226	e	258	b	290	b
195	e	227	e	259	d	291	b
196	b	228	c	260	c	292	a
197	c	229	d	261	e	293	b
198	b	230	d	262	e	294	a
199	e	231	a	263	d	295	b
200	e	232	a	264	c		

IV. HORMONAL DRUGS. DRUGS THAT AFFECT METABOLISM, INFLAMMATION AND IMMUNITY

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
296	d	306	e	316	d	326	d
297	a	307	d	317	a	327	c
298	c	308	b	318	b	328	e
299	e	309	b	319	e	329	d
300	e	310	c	320	c	330	d
301	e	311	a	321	d	331	c
302	e	312	c	322	e		
303	c	313	d	323	a		
304	d	314	c	324	c		
305	e	315	d	325	a		

V. CHEMOTHERAPEUTIC AGENTS

№ question	Correct answers	№ question	Correct answers	№ question	Correct answers	№ question	Correct answers
332	d	350	e	368	a	386	b
333	b	351	d	369	d	387	d
334	d	352	d	370	e	388	b
335	c	353	c	371	d	389	d
336	e	354	a	372	a	390	c
337	e	355	e	373	d	391	a
338	c	356	b	374	c	392	a
339	d	357	b	375	e	393	a
340	c	358	b	376	d	394	d
341	d	359	e	377	a	395	c
342	d	360	b	378	b	396	a
343	c	361	c	379	e	397	e
344	b	362	d	380	b	398	c
345	e	363	c	381	d	399	d
346	a	364	d	382	c	400	a
347	e	365	d	383	d		
348	c	366	a	384	c		
349	d	367	b	385	e		

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