# Tests on clinical pharmacy (2013-2018)

# (<u>correct answer – A</u> – in all cases)

- 1. Which of the below-listed drugs is used for thrombolytic therapy in case of myocardial infarction?
  - A. Streptokinase
  - **B.** Heparine
  - C. Phenylinum
  - D. Ticlopidine
  - E. Acetylsalicylic acid
- 2. A gravida in her 20th week of gestation got ill with pneumonia. What chemotherapeutical drug may be administered with no risk for the fetus development?
- A. Benzylpenicillinum
- B. Gentamycin
- C. Sulfalenum
- D. Laevomycetinum
- E. Ofloxacinum
- 3. A patient with hypertension has been administered one of antihypertensive drugs. Blood pressure dropped back to normal, but the patient has developed a persistent dry cough. Which of the following drugs has such a side effect?
  - A. Enalapril maleate
  - **B.Propranolol**
  - C.Clonidine
  - D.Furosemide
  - E. Nifedipine
- 4. Name the reason for the reduction of anticoagulant effect of syncumar when it is applied in combination with phenobarbital:
  - A. Phenobarbital activates microsomal liver enzymes
- B. Phenobarbital inhibits microsomal liver enzymes
- C. Development of syncumar allergy
- ${f D.}$  These drugs are antagonists
- E. Mutual inactivation
- 5. Which preparation is the specific antidote in case of intoxication with iron preparations?
- A. Deferoxamium
- B. Protamine sulfate
- C. Bemegridum
- D. Atropinum

#### E. Penicillamine

- 6. A pregnant woman fell ill with severe pneumonia. Which of these antimicrobials should be administered to this patient?
- A. Cefotaxime
- B. Gentamicin sulfate
- C. Tetracycline hydrochloride
- D. Ofloxacin
- E. Biseptol
- 7. A 6-year-old child with pneumonia has been administered an antibiotic. After treatment the child lost his hearing. What group of antibiotics might have caused this complication?
  - A. Aminogly cosides
  - **B.** Cephalosporins
  - C. Macrolides
  - D. Natural penicillins
  - E. Semi-synthetic penicillins
- 8. A 52-year-old patient had myocardial infarction and was discharged from the hospital after the stationery treatment. What daily dose of acetylsalicylic acid should be administered in order to prevent thrombosis?
- A. 100 mg
- B. 500 mg
- C. 1000 mg
- D. 200 mg
- E. 50 mg
- 9. A patient has chronic pancreatitis with apparent presentations of pancreatic exocrine hypofunction. Which of the following drugs would be the most appropriate in this case?
- A. Pancreatinum
- B. Drotaverine
- C. De-Nol
- D. Omeprazole
- E. Acidin pepsinum
- 10. A patient got an injection of 0,25% novocaine solution for the purpose of anaesthetization. Suddenly the patient has presented with red spots, intense sweati- ng, tachycardia, bronchospasm, edema of nasal mucous membrane. What is the cause of this complication?

- A. Immediate allergy
- B. Delayed allergy
- C. Local irritation
- D. Tachyphylaxis
- E. Abstinence syndrome
  - 11. A 15-year-old patient has been first diagnosed with type I diabetes mellitus. Which antihyperglycemic drug should be administered in this case?
    - A.Insulin
    - B. Metformin
    - C. Diabetone
    - **D.**Glurenorm
    - E. Glibenclamide
  - 12. Which of the following non-steroid anti-inflammatory agents has the least harmful effect on the mucosa of the gastrointestinal tract?
    - A. Nimesulide
    - B. Diclofenac
    - C. Indomethacin
    - D. Piroxicam
    - E. Acetylsalicylic acid
  - 13. Which drug is used for thrombolysis in case of acute myocardial infarction?
- A. Alteplase
- B. Acetylsalicylic acid
- C. Heparin
- D. Pentoxifylline
- E. Fraxiparine
- 14. A woman asked a pharmaceutist to dispense an antipyretic for an 8-month-old child. Which drug should be recommended?
- A. Paracetamol
- **B.** Acetylsalicylic acid
- C. Indomethacin
- D. Diclofenac sodium
- E. Piroxicam
- 15. A 70-year-old patient consulted a doctor about elevated arterial pressure. He has a history of benign hyperplasia of prostate. What drug should be administered in this case?
- A. Doxazosin

- B. Enalapril
- C. Propranolol
- D. Diltiazem
- E. Losartan
- 16. Recommend a patient with acute bronchitis a mucolytic drug that facilitates expectoration:
  - A.Acetylcysteine
  - B. Glaucine
  - C. Loratadine
  - D. Diclofenac sodium
  - E. Drotaverine hydrochloride
  - 17. A patient with atopic dermatitis presented at the hospital. Which drug with anti-inflammatory and antiallergic effect should be administered to this patient?
  - A.Prednisolone
  - B. Aethamidum
  - C. Oxytocin
  - D. Insulin
  - E. Retabolil
  - 18. A patient with atherosclerosis has been administered an antiatherosclerotic agent. Specify this drug:
  - A.Phenofibrate
  - B. Ascorbic acid
  - C. Pyracetam
  - D. Dexamethasone
  - E. Phenylbutazone
  - 19. A patient after bee's stings has angioedema (Quincke's edema). Which drug should be immediately inject to eliminate this condition?
    - F. Epinephrine hydrochloride
    - G. Sodium chloride
    - H. Platyphyllini hydrotartras
    - I. Atropine sulfate
    - J. Anaprilinum
- 20. In course of pharmacotherapy of bronchitis a patient was found to have dyspeptic disorders, photodermatitis, liver dysfunction. Which of the prescribed drugs might have caused these manifestations?

- A. Doxycyclin
- B. Paracetamolum
- C. Ascorbic acid
- D. Acetylcysteinum
- E. Codeine phosphate
  - 21. A patient who has been suffering from gastric diseases for a long time is found to have hyperchromic anemia. Which of the following drugs is applied for this pathology treatment?
  - A.Cyanocobalamine
  - B. Ascorbic acid
  - C. Unitiol
  - D. Ferrum Lek
  - E. Oxyferriscorbone
  - 22. Treatment of poisonings with inorganic mercury compounds includes the use of the following antidote:
  - A.Unithiol
  - B. Naloxone
  - C. Tetacinum-calcium
  - **D.** Desferal
  - E. Dexamethasone
  - 23. A patient has been taking isosorbide for stenocardia prevention for quite a long time. Now he notes a significant decrease in the effect of the drug. What is this phenomenon called?
  - A.Tolerance
  - B. Cumulation
  - C. Physical dependence
  - **D.** Allergy
  - E. Potentiation
  - 24. A patient with myocardial infarction has been given an intravenous njection of a direct-acting anticoagulant. Select it among the listed drugs:
  - A.Heparin
  - B. Neodicumarinum
  - C. Vikasolum
  - D. Thrombin
  - E. Calcium gluconate
  - 25. Which drug with antagonistic effect can be used to stop bleeding caused

by prolonged use of neodicumarinum?

- A. Vikasolum
- B. Aminocapronic acid
- C. Etamsylate
- D. Fibrinogen
- E. Ascorbic acid
- 26. Which anaesthetic, anti-inflammatory, the least harmful for the stomach preparation can be recommended to a patient with exacerbation of rheumatoid arthritis?
- A. Celecoxib
- B. Diclofenac sodium
- C. Acetylsalicylic acid
- D. Ibuprofenum
- E. Indometacinum
- 27. A female patient in the first trimester of pregnancy has been diagnosed with acute pyelonephritis. What is the antibi- otic drug of choice for treating this patient?
  - A.Amoxicillin
  - B. Norfloxacin
  - C. Gentamicin
  - **D.**Chloramphenicol
  - E. Amikacin
- 28. A man with a long history of chronic hepatitis has been diagnosed with pneumonia. Which of the following anti- bacterial drugs can be applied in this clinical situation?
- A. Amoxicillin
- B. Tetracycline
- C. Biseptol
- D. Rifampicin
- E. Vancomycin
- 29. Which of the following is the drug of choice for bronchial asthma attacks prevention?
- A. Cromolyn sodium
- B. Salbutamol
- C. Drotaverine
- D. Diphenhydramine hydrochloride
- E. Ambroxol

- 30. A 24-year-old patient has been suffering from diabetes mellitus type I for 8 years. Diabetic nephropathy provoked development of symptomatic arterial hypertension. Which of the \_ollowing drugs is indicated for long-term therapy?
- A. Enalapril
- B. Propranolol
- C. Clonidine
- D. Dibazol
- E. Dichlothiazide
- 31. Treatment course of essential hypertension includes diuretics. Which diuretic DOES NOT NEED to be combined with potassium preparations?
  - A.Triamteren
  - **B.** Clopamide
  - C. Dichlothiazide
  - D. Furosemide
  - E. Ethacrynic acid
- 32. A patient who has taken phenobarbital for a long time was prescribed diclofenac sodium. However the anti-inflammatory effect of diclofenac appeared to be less than expected due to the pharmacokinetic interaction of these drugs. Such interaction might be the result of the following processes:
- A. Accelerated drug metabolism in liver
- B. Decelerated drug metabolism in liver
- C. Reduced protein concentration in plasma
- D. Change of receptor sensibility
- E. Increased drug dosage
- 33. A 60-year-old patient has essential hypertension stage II, coronary disease, bronchial asthma. After pharmacotherapy correction the patient exhibited a bronchospastic attack, intensified dyspnea. What drug provoked this complication?
- A. Propranolol
- B. Nifedipine
- C. Euphyllinum
- D. Mucaltinum
- E. Salbutamolum
- 34. After an emotional stress a 60-year-old patient presented with chest pain irradiating to the left arm. Specify a drug that relieves pain in this case:

- A. Nitroglycerine
- B. Nifedipine
- C. Diltiazem
- D. Propranolol
- E. Metoprolol
- 35. A 70-year-old patient consulted a doctor about elevated arterial pressure. He has a history of benign hyperplasia of prostate. What drug should be administered in this case?
- A. Doxazosin
- B. Enalapril
- C. Propranolol
- D. Diltiazem
- E. Losartan
- 36. Which of the listed antibacterial drugs should NOT be administered to a patient with diabetes mellitus type II being treated with glibenclamid?
- A. Co-trimoxazolum
- B. Midecamycin
- C. Gentamycinum
- D. Benzylpenicillinum
- E. Doxycycline
- 37. What drug may cause constipation in a patient undergoing combined therapy for arterial hypertension?
- A. Verapamil
- B. Furosemide
- C. Trimetazidine
- D. Panangin
- E. Acetylsalicilic acid in small dosages
- 38. In order to arrest stenocardia attacks a patient takes nitroglycerin capsules. What is the rational way of the drug introduction?
- A. Sublingual
- B. Peroral
- C. Rectal
- D. Inhalation
- E. Hypodermic
- 39. Recommend a patient with acute bronchitis a mucolytic drug that ease difficulty in expectoration:

- A. Acetylcysteine
- B. Glaucine
- C. Loratadine
- D. Diclofenac sodium
- E. Drotaverine hydrochloride
- 40. A patient with atherosclerosis has been administered an anti-atherosclerotic agent. Specify this drug:
- A. Phenofibrate
- B. Ascorbic acid
- C. Pyracetam
- D. Dexamethasone
- E. Phenylbutazone
- 41. A 68-year-old female patient has been continuously taking furosemide for heart failure treatment. What drug should be used to prevent hypokalemia in patients taking furosemide?
- A. Panangin
- B. Atp-long
- C. Mildronatum
- D. Trimetazidine
- E. Sustac forte
- 42. A woman in the III trimester of pregnancy has an acute respiratory viral disease accompanied with body temperature rise up to 39<sup>O</sup>C. Which of the drugs should be recommended?
- A. Paracetamol
- B. Celecoxib
- C. Indomethacin
- D. Acetylsalicylic acid
- E. Diclofenac sodium
- 43. A patient consults a pharmaceutist about taking acetylsalicylic acid as an antiaggregant. What is the daily dose that should be recommended for continuous use?
- A. 0,1-0,3 g
- B. 0,5-1,0 g
- C. 1,0-2,0 g
- D. 2,0-3,0
- E. Over 4,0 g

- 44. It is necessary to prescribe non-steroid anti-inflammatory drug for patient with rheumatoid arthritis and concomitant duodenal ulcer. Which drug is the drug of choice in this case?
- A. Celecoxib
- B. Acetylsalicylic acid
- C. Paracetamol
- **D.** Analgin
- E. Diclofenac sodium
- 45. A patient with bronchial asthma has been administered a drug from the group of beta-adrenergic agonists. Specify this drug:
- A. Salbutamol
- B. Diazepam
- C. Doxycycline hydrochloride
- D. Nitroglycerine
- E. Digoxin
- 46. During the treatment of chronic heart failure with digoxin in a patient having bradycardia, nausea, vomiting, blurred vision. Which drug is the antidote in this case?
- A. Unithiol
- B. Tetacinum calcium
- C. Dipiroximum
- D. Amyl nitrite
- E. Atropine sulphate
- 47. Select a loop diuretic of strong, emergency and short-term action from the listed below:
- A. Furosemide
- B. Clopamide
- C. Acetazolamide
- **D.** Spironolactone
- E. Triamterene
- 48. A man with a long history of chronic hepatitis has been diagnosed with pneumonia. Which of the following anti- bacterial drugs can be applied in this clinical situation?
- A. Amoxicillin
- **B.** Tetracycline
- C. Biseptol
- D. Rifampicin

# E. Vancomycin

- 49. A 57-year-old female patient was diagnosed with rheumatoid arthritis; she has also a history of stomach ulcer. What drug from the group of nonsteroid anti-inflammatory drugs may be recommended this patient?
- A. Celecoxib
- B. Diclofenac
- C. Aspirin
- D. Indometacin
- E. Mefenamic acid
- 50. A patient suffering from stomach ulcer was prescribed an antiulcer drug that also reduces secretion of hydrochloric acid and inhibits Chelicobacter pylori. What drug is it?
- A. Omeprazole
- B. Gastrocepine
- C. Maalox
- D. Famotidine
- E. Almagel
- 51. A 40-year-old patient suffers from bronchial asthma and cardiac rhythm disturbance in form of bradyarrhythmia. Drugs of which pharmacological group should be administered for bronchospasm suppression?
- A. M-cholinergic antagonists
- B. Beta-blockers
- C. M-cholinomimetics
- D. Cholinesterase inhibitors
- E. Muscle relaxant
- 52. 6 months after treatment a patient with coronary heart disease developed tolerance to the prolonged-action nitrates. What drug with nitrate-similar effect should be recommended in this case?
- A. Molsidomine
- B. Nifedipine
- C. Prazosin
- D. Verapamil
- E. Metoprolol
- 53. Which preparation is the specific antidote in case of intoxication with iron preparations?
- A. Deferoxamium

- B. Protamine sulfate
- C. Bemegridum
- D. Atropinum
- E. Penicillamine
- 54. A 6-year-old child with pneumonia was prescribed an antibiotic. After the treatment the child became deaf. Which antibiotic group might have caused this complication?
- A. Aminoglycosides
- B. Cephalosporins
- C. Macrolides
- D. Natural penicillin
- E. Semisynthetic penicillin
- 55. A patient suffering from hypertension consulted a doctor about dry cough that was presumably provoked by antihypertensive therapy. What antihypertensive drug had she been taking?
- A. Lisinopril
- B. Atenolol
- C. Nifedipine
- D. Furosemidum
- E. Hydrochlorthiazide
- 56. Choose an optimal antibacterial drug for the mycoplasmal pneumonia treatment:
- A. Rovamycine
- B. Gentamycinum
- C. Penicillin
- D. Ampicillin
- E. Amoksiklav
- 57. Which of the listed preparations should be used as antidote and included into the first-aid kit required at factories where acute intoxications with arsenic, mercury, chrome and bismuth compounds are possible?
- A. Unithiolum
- B. Adrenalinum
- C. Atropinum
- D. Morphinum
- E. Droperidolum
- 58. Examination of a patient who has been treated for rheumatoid arthritis for a

long time revealed hyperglycemia. What drug might have caused it?

- A. Dexamethasone
- B. Diclofenac sodium
- C. Ibuprofen
- D. Chloroquine
- E. Levamisole
- 59. A 54-year-old patient who has been suffering from hyperacidic gastritis for several years was prescribed almagel. What pharmacotherapeutical complications on the part of digestive organs may be expected in the first place?
- A. Constipation
- B. Nausea
- C. Anorexia
- D. Emesis
- E. Diarrhea
- 60. A 26-year-old patient was diagnosed with community-acquired pneumonia provoked by mycoplasma. Choose the appropriate antimicrobial preparation for the patient treatment:
- A. Rovamycine
- B. Amoxicillin
- C. Gentamycinum
- D. Benzylpenicillinum
- E. Amoksiklav
- 61. A 60-year-old patient has essential hypertension stage II, coronary disease, bronchial asthma. After pharmacotherapy correction the patient exhibited a bronchospastic attack, intensi- fied dyspnea. What drug provoked this complication?
- A. Propranolol
- B. Nifedipine
- C. Euphyllinum
- D. Mucaltinum
- E. Salbutamolum
- 62. A 67-year-old patient with chronic heart failure takes digoxin. In order to reduce its side effects the patient's doctor recommended to combine it with the following drug:
- A. Panangin
- B. Calcium gluconate
- C. Euphyllinum

- D. Hydrochlorthiazide
- E. Calcium chloride
- 63. A woman who has been treated for infiltrative focal tuberculosis for a long time complains of acute hearing impairment. Which of the following preparations might be the cause of such side effect?
- A. Streptomycin
- B. Isoniazid
- C. Ethambutol
- D. Rifampicin
- E. Ethionamidum
- 64. Which of the listed antibacterial drugs should NOT be administered to a patient with diabetes mellitus type II being treated with glibenclamid?
- A. Co-trimoxazolum
- B. Midecamycin
- C. Gentamycinum
- D. Benzylpenicillinum
- E. Doxycycline
- 65. Which of the listed pharmacolgical groups of antihypertensive drugs is contraindicated the patients with bronchial asthma?
- A. Beta-adrenergic blocking agent
- B. ACE inhibitor
- C. Calcium channel blockers
- D. Angiotensin receptors blockers
- E. Diuretics
- 66. After a craniocerebral trauma a patient was administered pyracetam. This drug relates to the following pharmacological group:
- A. Nootropic agent
- B. Nonnarcotic (nonopioid) analgetic
- C. Tranquilizers
- **D.** Anesthetic agent
- E. Neuroleptic
- 67. A patient after bee's stings has angioedema (Quincke's edema). Which drug should be immediately inject to eliminate this condition?
- A. Epinephrine hydrochloride
- B. Sodium chloride
- C. Platyphyllini hydrotartras

- D. Atropine sulfate
- E. Anaprilinum
- 68. A patient with hypertension was administered metoprolol for the arterial pressure reduction. What is its mechanism of action?
- A. Beta adrenoreceptor blockade
- B. Alpha adrenoceptor blockade
- C. Indirect adrenomimetic action
- D. Antispasmodic
- E. Angiotensinic receptors blockade
- 69. For thrombosis treatment a patient was prescribed a drug from the group of direct anticoagulants. What drug is it?
- A. Heparin
- B. Fenilin (phenylinum)
- C. Syncumar
- D. Neodicumarin
- E. Vikasol
- 70. In course of pharmacotherapy of bronchitis a patient was found to have dyspeptic disorders, photodermatitis, liver dysfunction. Which of the prescribed drugs might have caused these manifestations?
- A. Doxycyclin
- B. Paracetamolum
- C. Ascorbic acid
- D. Acetylcysteinum
- E. Codeine phosphate
- 71. It is necessary to prescribe non-steroid anti-inflammatory drug for patient with rheumatoid arthritis and concomitant duodenal ulcer. Which drug is the drug of choice in this case?
- A. Celecoxib
- B. Acetylsalicylic acid
- C. Paracetamol
- **D.** Analgin
- E. Diclofenac sodium
- 72. Which anaesthetic, anti-inflammatory, the least harmful for the stomach preparation can be recommended to a patient with exacerbation of rheumatoid arthritis?
- A. Celecoxib

- B. Diclofenac sodium
- C. Acetylsalicylic acid
- D. Ibuprofenum
- E. Indometacinum
- 73. Which of the following is the drug of choice for bronchial asthma attacks prevention?
- A. Cromolyn sodium
- B. Salbutamol
- C. Drotaverine
- D. Diphenhydramine hydrochloride
- E. Ambroxol
- 74. A patient suffering from epilepsy has taken Phenobarbital for a long time and developed drug tolerance. What is the mechanism of this phenomenon development?
- A. Acceleration of biotransformation
- B. Absorption process reduction
- C. Receptor's sensitivity enhancement
- D. Inhibition of biotransformation
- E. Substances accumulation in the body
- 75. Absorption of tetracycline preparations will be reduced when they are administered simultaneously with antacids. This is an example for:
- A. Pharmacokinetic incompatibility
- B. Pharmaceutical incompatibility
- C. Pharmacodynamic incompatibility
- D. Drugs synergism
- E. Functional drugs antagonism
- 76. A 24-year-old patient has been suffering for diabetes mellitus type I for 8 years. Diabetic nephropathy provoked development of symptomatic arterial hypertension. Which of the following drugs is indicated for long-term therapy?
- A. Enalapril
- B. Propranolol
- C. Clonidine
- **D.** Dibazol
- E. Dichlothiazide

- 77. 6 months after treatment a patient with coronary heart disease developed tolerance to the nitrates with prolonged action. What drug with nitrate-similar effect should be recommended in this case?
- A. Molsidomine
- B. Nifedipine
- C. Prasosine
- D. Verapamil
- E. Metoprolol
- 78. A 33-year-old woman who has been treated for chronic polyarthritis for a long time complains about arterial pressure rise, change of adipose tissue distribution, menstrual cycle disorder. What preparation has she taken?
- A. Prednisolone
- B. Indometacin
- C. Butadion
- D. Synaflan
- E. Diclofenac sodium
- 79. A patient suffering from essential hypertension has increased concentration of renin in blood plasma. Which pharmacological group should be preferred for this patient treatment?
- A. ACE inhibitors
- B.  $\alpha$ -adrenoblockers
- C. Diuretics
- D. Blockers of calcium channels
- E. Sympatholytics
- 80. Choose an optimal antibacterial drug for the mycoplasmal pneumonia treatment:
- A. Rovamycin
- B. Gentamycin
- C. Penicillin
- D. Ampicillin
- E. Amoxyclav
- 81. Examination of a patient who has been treated for rheumatoid arthritis for a long time revealed hyperglycemia. It might have been caused by the following drug:
- A. Dexamethasone
- B. Diclofenac sodium
- C. Ibuprofen
- D. Delagil
- E. Levamisole
- 82. What drug may cause constipation in a patient undergoing combined therapy for arterial hypertension?

- A. Verapamil
- B. Furosemide
- C. Trimetazidine
- D. Panangin
- E. Acetylsalicilic acid in small dosages
- 83. A patient was warned that taking the prescribed preparation might cause cough.

What drug is it?

- A. Lisinopril
- B. Clonidine
- C. Phenihidine
- D. Dichlothiazide
- E. Metoprolol
- 84. A 52-year-old patient complains of having increased arterial pressure for a month. She has a 5-year history of bronchial asthma. What group of hypotensive drugs should NOT be recommended this patient?
- A.  $\beta$ -adrenoreceptor blockers
- B. Calcium channel blockers
- C. Tranquilizers
- D. Angiotensin receptor blockers
- E. Diuretics
- 85. A patient suffering from arterial hypertension and chronic bronchitis suddenly presented with dry cough and dyspnea. Body temperature remained unchanged. It is known that the patient takes captopril. These symptoms can be explained by increased generation of:
- A. Bradyquinine
- B. Angiotensin-1
- C. Renin
- D. Aldosterone
- E. Natriuretic peptide
- 86. Which preparation from the group of laxative agents IS NOT to be administered in case of intoxication with CNS inhibiting substances?
- A. Magnesium sulfate
- B. Sodium sulfate
- C. Vaseline oil
- D. Bisacodyl
- E. Guttalax
- 87. A patient with bronchial asthma was prescribed salbutamol that has led to relief of bronchospasm symptoms. This is associated with stimulation of:
- A.  $\beta_2$ -adrenoreceptors

- B.  $\alpha_1$ -adrenoreceptors
- C. Muscarinic cholinoreceptors
- D. Acetylcholine synthesis
- E.  $\beta_1$ -adrenoreceptors
- 88. A 46-year-old patient suffering from chronic bronchitis came to a pharmacy. What expectorative drug may be recommended?
- A. Ambroxol
- B. Falimint
- C. Libexin
- D. Glauvent
- E. Salbutamol
- 89. A 26-year-old pregnant woman (III trimester of pregnancy) complains about body temperature rise up to 39°C. What febrifuge may be recommended in this case?
- A. Paracetamol
- B. Aspirin
- C. Diclofenac
- D. Analgin
- E. Indometacin
- 90. A 25-year-old patient has been taking antibiotics for 7 days. Antibiotic therapy has caused a complication in form of bowel dysbacteriosis. This complication should be treated with drugs of the following pharmacological group:
- A. Probiotics
- B. Spasmolytics
- C. Cholagogic
- D. Antacids
- E. Adaptogens
- 91. A 57-year-old female patient was diagnosed with rheumatoid arthritis; she has also a history of stomach ulcer. What drug from the group of nonsteroid antiinflammatory drugsmay be recommended this patient?
- A. Celecoxib
- B. Diclofenac
- C. Aspirin
- D. Indometacin
- E. Mefenamic acid
- 92. A patient suffering from stomach ulcer was prescribed an antiulcer drug that also reduces secretion of hydrochloric acid and inhibits Chelicobacter pylori. What drug is it?
- A. Omeprazole
- B. Gastrocepine

- C. Maalox
- D. Famotidine
- E. Almagel
- 93. A patient with arterial hypertension was administered a non-prescription drug for symptomatic treatment of rhinitis. What pharmaceutical form should be recommended the patient in order to reduce as much as possible the likelihood of development of undesirable systemic vasoconstriction?
- A. Ointment
- B. Gel
- C. Drops
- D. Aerosol
- E. Tablets
- 94. A 56-year-old patient suffering from essential hypertension was prescribed an inhibitor of angiotensin converting enzyme (ACE) and a potassium-sparing diuretic. Such combination is:
- A. Unreasonable because it increases risk of hyperkaliemia development
- B. Reasonable because it decreases risk of hyperkaliemia development
- C. Reasonable because it potentiates hypotensive effect of ACE inhibitor
- D. Unreasonable because it reduces hypotensive effect of ACE inhibitor
- E. Unreasonable because it increases risk of orthostatic collapse development
- 95. Treatment course of essential hypertension includes diuretics. Which diuretic DOES NOT NEED to be combined with potassium preparations?
- A. Triamteren
- B. Clopamide
- C. Dichlothiazide
- D. Furosemide
- E. Ethacrynic acid
- 96. A 67-year-old patient who undergoes treatment for bronchial asthma presents with limb tremor, headache, insomnia, extrasystole. What drug might have caused such symptoms?
- A. Theophylline
- B. Prednisolone
- C. Tavegyl
- D. Intal
- E. Acetylcysteine
- 97. A patient who has taken phenobarbital for a long time was prescribed diclofenac sodium. However, the anti-inflammatory effect of diclofenac appeared to be less than expected due to the pharmacokinetic interaction of these drugs. Such interaction might be the result of the following processes:

- A. Accelerated drug metabolism in liver
- B. Decelerated drug metabolism in liver
- C. Reduced protein concentration in plasma
- D. Change of receptor sensibility
- E. Increased drug dosage
- 98. A patient, who had a case of cardiac infarction, is recommended to take acetylsalicylic acid to:
- A. Decrease thrombocyte aggregation
- B. Decrease body temperature
- C. Dilate coronary vessels
- D. Decrease inflammation
- E. Lower cholesterol rate
- 99. Which of the following anti- hypertensive drugs has potassium- sparing action?
- A. Triamterene
- B. Furosemide
- C. Prazosin
- D. Metoprolol
- E. Diltiazem
- 100. Benzathine benzylpenicillin is the drug of choice for treatment of the following disease:
- A. Syphilis
- B. Intestinalinfection
- C. Pneumonia
- D. Tonsillitis
- E. Furunculosis
- 101. A patient suffering from bronchial asthma has been diagnosed with essential hypertension. What antihypertensive drug is contraindicated in this case?
- A. Propranolol
- B. Captopril
- C. Amlodipine
- D. Hypothiazid (Hydrochlorothiazide)
- E. Verapamil
- 102. A female patient in the first trimester of her pregnancy has been diagnosed with acute pyelonephritis. What is the antibiotic drug of choice for treatment of this patient?
- A. Amoxicillin
- B. Norfloxacin
- C. Gentamicin
- D. Chloramphenicol
- E. Amikacin

- 103. A patient with moderately severe pneumonia has been administered ceftriaxone 1 time per day. The drug should be taken once a day due to its following property:
- A. Slow excretion
- B. Presence of bactericidal action
- C. Wide range of action
- D. Cumulative ability
- E. Poor absorption from the injection site
- 104. A 43-year-old patient with a severe form of rheumatoid arthritis has been administered a certain drug for background therapy. Specify this drug:
- A. Methotrexate
- B. Diclofenacsodium
- C. Nimesulide
- D. Prednisolone
- E. Methylprednisolone
- 105. Rifampicin is a cytochrome P450 inducer; therefore, its interaction with other chemically active drugs:
- A. Can decrease concentration of other drugs
- B. Can increase concentration of other drugs
- C. Has no effect on concentration of other drugs
- D. Can result in binding with other metabolites
- E. Has no effect on toxicity of other drugs
- 106. Bronchodilatory effect of a short-acting  $\beta$ 2-adrenoceptoragonist salbutamol develops after:
- A. 5-10 minutes
- B. 20-30 minutes
- C. 45-60 minutes
- D. 2-3 hours
- E. 4-6 hours
- 107. A 35-year-old patient with tachycardia has been administered propranolol. Which of the following reactions may be caused by the use of beta-blockers?
- A. Bronchospasm
- B. Drug dependence
- C. Cumulation
- D. Blood pressure rise
- E. Constipations
- 108. A patient with signs of morphine intoxication has been delivered into an admission room. Name the necessary antidote:
- A. Naloxone

- B. Collargol
- C. Essentiale
- D. Ectericidum
- E. Trental (Pentoxifylline)
- 109. A patient, who had been taking acetylsalicylic acid, has developed hemorrhages of mucous membranes. This phenomenon is associated with:
- A. Inhibition of prothrombin synthesis
- B. Increased absorption in gastrointestinal tract
- C. Decreased absorption in gastrointestinal tract
- D. Disorder of protein binding
- E. Changed volume of distribution
- 110. A 48-year-old woman addressed a dispensing chemist with complaints of constipations developing after she had started treatment of her chronic cardiovascular disease. What drug can slow down intestinal peristalsis?
- A. Verapamil
- B. Folicacid
- C. Losartan
- D. Ascorbic acid
- E. Enalapril
- 111. A 5-year-old boy suffering from pneumonia has problems with mucus expectoration. A doctor prescribed him a mucolytic drug that stimulates surfactant synthesis. Name this drug:
- A. Ambroxol
- B. Carbocisteine
- C. Mucaltin
- D. Acetylcysteine
- E. Potassium iodide
- 112. A patient with peptic ulcer disease has developed black-colored feces during combined pharmacotherapy. Name the drug that can be the cause of this development:
- A. Bismuth subcitrate
- B. Famotidine
- C. Omeprazole
- D. Lansoprazole
- E. Ranitidine
- 113. A 43-year-old patient was delivered to an admission room with renal colic attack. What group of drugs would be the most efficient during the attack?
- A. Antispasmodics
- B. Hepatoprotectors
- C. Antacids

- D. Antibiotics
- E. Cholagogues
- 114. A bus driver addressed a pharmacy due to his suffering from allergic rhinitis. What antihistamine with minimal sedative action can you recommend?
- A. Loratadine
- B. Clemastine
- C. Astemizole
- D. Diphenhydramine
- E. Chloropyramine
- 115. A 36-year-old patient complains of general weakness, somnolence, increased brittleness of nails, loss of hair. The patient was diagnosed with iron-deficiency anemia. What drug should be prescribed for treatment?
- A. Ferricsulfate
- B. Cyanocobalamin
- C. Folicacid
- D. Myelosanum (Busulfan)
- E. Riboxin(Inosine)
- 116. What hypotensive drug is an agent of choice for the patients suffering from arterial hypertension with concomitant type I diabetes mellitus?
- A. Lisinopril
- B. Hydrochlorothiazide
- C. Atenolol
- D. Labetalol
- E. Carvedilol
- 117. A patient with essential hypertension complains of infrequent occurrences of dry cough. Clinical and X-ray examination of the respiratory organs revealed no pathologies. What drug from those taken by the patient can cause cough as a side effect?
- A. Captopril
- B. Diltiazem
- C. Hydrochlorothiazide
- D. Nebivolol
- E. Prestarium (Perindopril)
- 118. A 53-year-old woman suffers from ischemic heart disease and angina pectoris. What drug can be used to stop angina pectoris attacks?
- A. Nitroglycerine
- B. Drotaverine hydrochloride
- C. Propranolol
- D. Dipiridamol
- E. Acetylsalicylic acid

- 119. A patient is 20 years old. After she was stung by a bee the patient developed Quincke's disease; rash in the form of blisters and papulae appeared on her torso. First aid in this case should start with administering the following drug:
- A. Prednisolone
- B. Penicillin
- C. Freshfrozenplasma
- D. Rheopolyglukin (Dextran)
- E. Haemodes
- 120. A patient with osteoarthritis (gonarthrosis) and peptic gastric ulcer in anamnesis should be prescribed a NSAID (nonsteroidal anti-inflammatory drug). What NSAID would be the safest for this patient?
- A. Meloxicam
- B. Acetylsalicylic acid
- C. Ibuprofen
- D. Indometacin
- E. Metamizolesodium
- 121. In the course of clinical instrumental examination a 45-year- old patient has been diagnosed with chronic helicobacter-associated type B gastritis. What group of drugs should be prescribed first of all?
- A. Anti-Helicobacter pylori agents
- B. Prokinetic agents
- C. Antacids
- D. Reparative drugs
- E. Anti-muscarinic agents
- 122. A 48-year-old patient has undergone incomplete amputation of the thyroid gland. Choose the drug for replacement therapy in case of hypothyroidism:
- A. L-thyroxin
- B. Hydrocortisone
- C. Insulin
- D. Metoprolol
- E. Prednisolone
- 123. A 34-year-old patient suffering from systemic lupus erythematosus takes methylprednisolone. On examination the patient's blood calcium is revealed to below. A doctor suspects osteoporosis development. It is necessary to prescribe the patient calcium preparations and:
- A. Vitamin D3
- B. B-group vitamins
- C. Vitamin C
- D. Vitamin A

#### E. Vitamin E

- 124. A 52-year-old patient has been diagnosed with gouty arthritis, phase 2. What drug should be basic in treatment of this patient?
- A. Allopurinol
- B. Hydrochlorothiazide
- C. Paracetamol
- D. Furosemide
- E. Penicillin
- 125. A patient suffering from bronchial asthma was diagnosed with essential hypertension. What antihypertensive drug is contraindicated for this patient?
- A. Propranolol
- B. Captopril
- C. Amlodipine
- D. Hypothiazid (Hydrochlorothiazide)
- E. Verapamil
- 126. A 43-year-old patient with a severe form of rheumatoid arthritis has been administered a certain drug for background therapy. Specify this drug:
- A. Methotrexate
- B. Diclofenac sodium
- C. Nimesulide
- D. Prednisolone
- E. Methylprednisolone
- 127. A 35-year-old patient with tachycardia has been administered propranolol. Which of the following reactions may be caused by the use of  $\beta$ -blockers?
- A. Bronchospasm
- B. Drug dependence
- C. Cumulation
- D. Blood pressure rise
- E. Constipations
- 128. Which of the following diuretics SHOULD NOT be given to the patients with impaired hearing?
- A. Furosemide
- B. Spironolactone
- C. Clopamide
- D. Indapamide
- E. Chlorthalidone
- 129. A patient, who has been taking acetylsalicylic acid, developed hemorrhages of mucous membranes. This phenomenon is associated with:

- A. Inhibition of the prothrombin synthesis
- B. Increased absorption in the gastrointestinal tract
- C. Decreased absorption in the gastrointestinal tract
- D. Disorder of protein binding
- E. Changed volume of distribution
- 130. Simultaneous application of doxycycline hydrochloride and oral contraceptive causes:
- A. Reduction of oral contraceptives effectiveness
- B. Increase of oral contraceptives effectiveness
- C. Increase of the antibacterial effect of doxycycline
- D. Reduction of the antibacterial effect of doxycycline
- E. –
- 131. To treat iron-deficiency anemia the following drug is usually prescribed:
- A. Ferroplex
- B. Furagin (Furazidinum)
- C. Corticosteroids
- D. Heparin
- E. Vicasol (Menadione)
- 132. A 70-year-old patient with stenocardia claims that the pharmacy had sold him a drug that relieved an attack of stenocardia but instead caused an acute bursting headache. What antihypertensive drug is this side-effect typical of?
- A. Nitrosorbid
- B. Amlodipine
- C. Nifedipine
- D. Trimetazidine
- E. Metoprolol
- 133. A 45-year-old man has been taking long-acting nitrates twice a day for a year. Currently the decrease in effectiveness of the pharmacotherapy is being observed. What side-effect can be suspected in the first place?
- A. Development of nitrate tolerance
- B. Progressing ischemic heart disease
- C. Progressing coronary atherosclerosis
- D. Myocardial infarction
- E. Impairment of coronary circulation
- 134. A 43-year-old patient was delivered to an admission room with renal colic attack. What group of drugs would be the most effective during the attack?
- A. Antispasmodics
- B. Hepatoprotectors
- C. Antacids

- D. Antibiotics
- E. Cholagogues
- 135. What antibiotic has beta-lactam cycle in its structure?
- A. Benzylpenicillin potassium salt
- B. Doxycycline hyclate
- C. Chloramphenicol
- D. Streptomycin sulfate
- E. Lincomycin hydrochloride
- 136. What hypotensive drug is an agent of choice for the patients suffering from arterial hypertension with concomitant type I diabetes mellitus?
- A. Lisinopril
- B. Hydrochlorothiazide
- C. Atenolol
- D. Labetalol
- E. Carvedilol
- 137. A 25-year-old man is diagnosed with acute pyelonephritis of moderate severity.

What drugs should be prescribed for etiotropic therapy?

- A. Antimicrobial agents
- B. Glucocorticoids
- C. Nonsteroidal antiinflammatory drugs
- D. Anticholinesterase drugs
- E. Antiarrhythmic drugs
- 138. A 53-year-old woman suffers from ischemic heart disease and angina pectoris.

What drug can be used to stop angina pectoris attacks?

- A. Nitroglycerine
- B. Drotaverine hydrochloride
- C. Propranolol
- D. Dipiridamol
- E. Acetylsalicylic acid
- 139. A patient is 20 years old. After she was stung by a bee the patient developed Quincke's disease; rash in the form of blisters and papulae appeared on her torso. First aid in this case should start with administering the following drug:
- A. Prednisolone
- B. Penicillin
- C. Fresh frozen plasma
- D. Rheopolyglukin (Dextran)
- E. Haemodes

- 140. A man with gastric ulcer is prescribed anti-Helicobacter pylori therapy. On the 3rd day the patient developed black coloring of feces. What had caused such changes? A. Bismuth subcitrate
- B. Omeprazole
- C. Metronidazole
- D. Tetracycline
- E. Tinidazole
- 141. A 3-year-old child is intolerant to paracetamol. What antipyretic drug can be taken instead?
- A. Ibuprofen
- B. Acetylsalicylic acid
- C. Nimesulide
- D. Naproxen
- E. Diclofenac sodium
- 142. A patient with angina pectoris takes long-acting nitrates. Consult him what side-effect is the most common for these drugs:
- A. Headache
- B. Nausea
- C. Vomiting
- D. Diarrhea
- E. Constipation
- 143. Genetically induced adverse reaction to a certain drug is caused by various enzyme defects. Name this reaction:
- A. Idiosyncrasy
- B. Withdrawal syndrome
- C. Steal syndrome
- D. Rebound effect
- E. Dysbiosis
- 144. A 43-year-old woman has come to a pharmacy with complaints of sharp headache in the occipital area, palpitations, "visual snow" in her eyes, nausea; her BP is 180/110 mm Hg. These symptoms correspond with:
- A. Hypertensic crisis
- B. Migraine attack
- C. Exertional angina pectoris attack
- D. Cervical osteochondrosis
- E. Acute conjunctivitis
- 145. A patient, who has undergone treatment for community-acquired pneumonia, complains of hearing impairment. What antibacterial drug could result in such a side-effect?

- A. Gentamicin
- B. Amoxicillin/clavulanate
- C. Cefazolin
- D. Ciprofloxacin
- E. Clarithromycin
- 146. A 36-year-old woman with herpetic rash on her lips has come to a pharmacy. Recommend her a drug for topical treatment:
- A. Acyclovir
- B. Fluconazole
- C. Levofloxacin
- D. Metronidazole
- E. Amikacin
- 147. A 65-year-old man with community-acquired pneumonia was prescribed antibiotic agent amikacin. It should be kept in mind, that amikacin has the following side-effect:
- A. Ototoxicity
- B. Red coloring of urine
- C. Vomiting
- D. Increased blood pressure
- E. Decreased blood pressure
- 148. Several cholesterol gallstones are detected in the gallbladder of a woman. Choose the drug to dissolve and excrete the stones:
- A. Ursodeoxycholic acid
- B. Papaverine
- C. Domperidone
- D. Loperamide
- E. Platyphyllin
- 148. A young mother has come to a pharmacy to buy an antipyretic drug for her 3-month-old infant. What dosage form would you choose for the infant?
- A. Suppositories
- B. Tablets
- C. Capsules
- D. Spray
- E. Lozenges
- 150. A 28-year-old woman came to a pharmacy complaining of constipation that developed after antacid treatment. What drug could be the cause of this symptom? A. Aluminium-containing drugs
- B. Magnesium-containing drugs
- C. Calcium carbonate
- D. Simethicone

## E. Ranitidine

- 151. A 60-year-old man has come to a pharmacy with complaints of impaired twilight vision, dry sclera, cracked and peeling skin. The dispensing chemist suspected hypovitaminosis and recommended the customer to take the following drug after consultation with the physician:
- A. Retinol acetate
- B. Tocopherol acetate
- C. Ergocalciferol
- D. Vicasol (Menadione)
- E. Ascorbic acid
- 152. A patient was prescribed an oral antibiotic for treatment and an antacid to remove heartburn symptoms. If the drugs are taken simultaneously their interaction can result in the following:
- A. Antibiotic malabsorption
- B. Relative overdosage
- C. Inhibition of hepatic microsomal enzymes
- D. Mutual potentiation
- E. Acceleration of metabolism and excretion
- 153. A 68-year-old man has been prescribed a hypolipidemic agent as a part of his combination therapy for ischemic heart disease. Name this drug:
- A. Atorvastatin
- B. Nitroglycerine
- C. Lisinopril
- D. Nifedipine
- E. Hydrochlorothiazide
- 154. When dispensing an antacid and ofloxacin in tablets, the dispensing chemist warned the customer that these drugs should be taken separately with 2- hour interval in between. Simultaneous taking of both drugs:
- A. Decreases of loxacin absorption
- B. Increases ofloxacin absorption
- C. Increases antacid effectiveness
- D. Decreases antacid effectiveness
- E. Increases risk of dysbiosis
- 155. Specify the drugs recommended for prevention and correction of dysbiotic problems caused by antibiotic therapy:
- A. Probiotics
- B. Antacids
- C. Prokinetics
- D. Uroseptics

#### E. Choleretics

- 156. A pharmacy customer complains of constricting retrosternal pain that irradiates into the left arm; he fears that he may die. The pain appeared suddenly after physical exertion. Name the first aid medicine in this case:
- A. Nitroglycerine
- B. Metacycline
- C. Naphthyzin (Naphazoline)
- D. Panangin
- E. Riboxin (Inosine)
- 157. A 63-year-old man suffering from ischemic heart disease was diagnosed with angle closure glaucoma. What group of drugs is CONTRAINDICATED in this case?
- A. Nitrates
- B. β-adrenergic blockers
- C. Calcium antagonists
- D. Anticoagulants
- E. Statins
- 158. A patient developed dry cough while undergoing pharmacotherapy for arterial hypertension. What group of drugs can be characterized by this side effect?
- A. ACE inhibitors
- B. Calcium antagonists
- C. Antipsychotics
- D. Tranquilizers
- E. Antacids
- 159. During an asphyxiating attack the patient with bronchial asthma was given intravenously a drug that caused nausea, headache, excitation, and palpitations as side effects. What drug can cause such reaction?
- A. Euphylline (Aminophylline)
- B. Prednisolone
- C. Ambroxol
- D. Suprastin (Chloropyramine)
- E. Papaverine hydrochloride
- 160. A 46-year-old pharmacy customer suffers from chronic bronchitis and needs a medicine to facilitate expectoration of thick viscous sputum. What drug is indicated in this case?
- A. Ambroxol
- B. Oxeladin
- C. Salbutamol
- D. Butamirate
- E. Codeine phosphate

- 161. A 60-year-old patient, who had suffered a myocardial infarction, was prescribed acetylsalicylic acid as an antiaggregant. Specify the optimal daily dosage of acetylsalicylic acid for antiaggregatory effect:
- A. 100 mg
- B. 200 mg
- C. 300 mg
- D. 400 mg
- E. 500 mg
- 162. A 25-year-old woman is in the third trimester of her pregnancy. During her regular examination, US detected a malformation in the fetus. Medical history of the patient shows that she was taking large doses of diazepam without prescription during her pregnancy. What type of side effect has occurred in this case?
- A. Teratogenic
- B. Embryotoxic
- C. Fetotoxic
- D. Carcinogenic
- E. Mutagenic
- 163. A woman with open tuberculosis is undergoing in-patient treatment in the tuberculosis clinic. What drug was prescribed by her physician for etiotropic treatment?
- A. Isoniazid
- B. Acyclovir
- C. Metronidazole
- D. Doxycycline hydrochloride
- E. Benzylpenicillin (Penicillin G)
- 164. A patient has been receiving palliative treatment with morphine hydrochloride for a week. Following that the patient demands continuation of this treatment. What phenomenon has occurred in this case?
- A. Dependence
- B. Tolerance
- C. Cumulation
- D. Potentiation
- E. Summation
- 165. During anti-Helicobacter quadrotherapy patient's feces colored black. What drug could have caused this effect?
- A. Bismuth subcitrate
- B. Omeprazole
- C. Amoxicillin
- D. Clarithromycin

### E. Metronidazole

- 166. A patient receives heparin for acute myocardial infarction. On the third day the patient developed hematuria and subcutaneous hematomas. What medicine should be prescribed as an antidote in this case?
- A. Protamine sulfate
- B. Vicasol (Menadione)
- C. Streptokinase
- D. Clopidogrel
- E. Acetylsalicylic acid
- 167. A 74-year-old man came to the pharmacy. He had been prescribed ampicillin for antibiotic treatment of dysenteric gastroenterocolitis. What group of drugs should be recommended for dysbiosis prevention in this case?
- A. Probiotics
- B. Antacids
- C. Enzymatic agents
- D. Sorbents
- E. Immunosuppressants
- 168. What antacid can cause constipations, osteoporosis, and encephalopathy when taken for a long period of time?
- A. Aluminium hydroxide
- B. Sodium bicarbonate
- C. Calcium carbonate
- D. Sodium alginate
- E. Magnesium oxide
- 169. A patient with arterial hypertension, who takes captopril, was prescribed a potassium-sparing diuretic, spironolactone. What complication can develop in the patient due to this combination of drugs?
- A. Hyperkalemia
- B. Hypocalcemia
- C. Hyponatremia
- D. Hypoglycemia
- E. Hypernatremia
- 170. A 63-year-old woman suffering from diabetic nephropathy with functional disturbance of the kidneys needs etiotropic treatment for focal pneumonia. What drug is CONTRAINDICATED in this case?
- A. Aminoglycosides
- B. Natural penicillins
- C. Synthetic penicillins
- D. Macrolides

# E. Combined penicillins

- 171. Reye syndrome (encephalopathy, fatty degeneration of liver) develops as a side effect in children suffering from fever of viral origin when they take the following medicine:
- A. Acetylsalicylic acid
- B. Celecoxib
- C. Ibuprofen
- D. Metamizole sodium
- E. Paracetamol
- 172. A 54-year-old hypertonic patient undergoing pharmacotherapy developed bronchial spasm. His physician considers it to be a therapy-induced complication caused by the drug that belongs to the following group:
- A. β-adrenergic blockers
- B. Calcium antagonists
- C. α-adrenergic blockers
- D. Ganglionic blockers
- E. Diuretics
- 173. A patient with chronic heart failure, who has been taking cardiac glycosides, developed signs of glycoside intoxication. What antidote would be advisable in this case?
- A. Unithiol (DMPS)
- B. Vicasol (Menadione)
- C. Protamine
- D. Naloxone
- E. Methionine
- 174. For treatment of enteric infection a 36-year-old woman was prescribed a nitrofuran derivative that is poorly absorbed in the intestine and takes its effect along the intestinal tract. Name this drug:
- A. Nifuroxazide
- B. Furacilin (Nitrofural)
- C. Nitroxoline
- D. Furadonin (Nitrofurantoin)
- E. Nalidixic acid