МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ КЫРГЫЗСКОЙ РЕСПУБЛИКИ
ОШСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

МЕЖДУНАРОДНЫЙ МЕДИЦИНСКИЙ ФАКУЛЬТЕТ

Кафедра патологий, базисной и клинической фармакологии

УТВЕРЖДЕНО -
на заседании кафедры патологии,
базисной и клин. фармакологии
Протокол №1 от 14 сентября 2023 г.

Зав.каф. _____

УТВЕРЖДЕНО -

Председатель УМС факультета
к.э.н Базиевой А

_____

ФОНД ТЕСТОВЫХ ЗАДАНИЙ

для итогового контрольного по дисциплине

«БАЗИСНАЯ ФАРМАКОЛОГИЯ»

На 2023-2024 учебный год
Направление: 560001- ЛЕЧЕБНОЕ ДЕЛО (GM)

Курс: 3 **Семестр:** 5

Сетка часов

Наименование дисциплины	**Всего**	**Кредит**	**Аудиторные занятия (90 ч.)**		**СРС**
			Лекции	**Практические**	
Базисная фармакология	**120 ч.**	**4 кр.**	**24 ч.**	**36 ч.**	**60 ч.**
Кол-во тестовых вопросов	**320**				

Данные о преподавателей: преподаватель кафедры патологий,базисной и клин. фармакологии: к.м.н., Момунова А., ст.преп Сеитова А., преп. Киргизбаева У.,преп.Абдиева Б., преп. Ажибаева Г.

Контактная информация: ММФ ОшГУ, каб. №209.

г. Ош. 2023г

ЭКСПЕРТНОЕ ЗАКЛЮЧЕНИЕ БАНКА ТЕСТОВЫХ ЗАДАНИЙ

кафедры «патологии, базисной и клин. фарм»

от «01» сентября 2023 г.

на разработанные тестовые задания по дисциплине

«базисная фармакология»

наименование дисциплины

доц. Мамедова А.А., ст.преп. Сеитова А.С.

/указать должность, ученую степень, Ф.И.О. автора (авторов)/

Тестовые задания проверены членом экспертной группы тестологов

доц. Жанбаева А.К.

/указать должность, ученую степень, Ф.И.О./

Направления проведения оценки структуры и содержания тестового задания

№	Направление экспертизы	Оценка экспертов	
1	Соответствие задания программам и стандартам обучения	Соответствует	Не соответствует
		✓	
2	Включение в тесты только наиболее важных, базовых знаний	Соответствует	Не соответствует
			✓
3	Ясность смысла тестовой ситуации и представления ТЗ	ясно	Не ясно
		✓	
4	Правильность ответа на вопрос ТЗ	Соответствует	Не соответствует
		✓	
5	Значимость содержания тестового задания (0-сомнительный, 1-допустимый, 2-важный, 3-существенный)	2 балл(ов)	
6	Соответствие необходимое число заданий по каждому разделу дисциплины исходя из его важности и числа часов, отведенных на его изучение в программе.	Соответствует	Не соответствует
		✓	

Членом экспертной группы выявлены следующие недостатки в тестовом задании В некоторых тестовых заданиях неправильно распределен ответ (цифровые)

Членом экспертной группы внесены следующие исправления (корректировки) в тестовое задание были переданы методисту для редактора

На основании представления тестовых заданий автором (авторами) и проведенной проверки сделала следующее заключение:

1) Содержание тестовых заданий **соответствует (не соответствует)** содержанию УМКД *(нужное подчеркнуть)*

2) Представленные тестовые задания в следующем объеме 320 вопросов: **соответствуют (не соответствуют)** требованиям, предъявляемым к количеству, уровням сложности и формам заданий для составления тестов. *(нужное подчеркнуть)*

Тестолог Жанбаева А.К. _____ /01.09.23/

подпись дата

Ознакомлен зав. кафедрой Мамедова А.А. _____ /01.09.23/.

подпись дата

Выписка из протокола № 1

заседания кафедры патологии, базисной и клинической фармакологии

ОШГУ ММФ

от «29» апр 2023г.

Всего членов: 26

Присутствовали: 26

Отсутствовали: 0

ПОВЕСТКА ДНЯ:

3. **Утверждение экзаменационных тестовых вопросов по дисциплинам кафедры за V семестр 2022-2023 учебного года.**

Слушали: зав. кафедрой Момунову А.А., которая ознакомила присутствующих количеством, структурой и содержанием экзаменационных тестовых вопросов за весенний семестр текущего учебного года.

Подробно остановилась на каждом предмете по каждой специальности:

1.1. Об утверждении экзаменационных тестов по Базисной фармакологии

Сетка часов по учебному плану:

Дисциплина	Всего час	Количество часов			СРС	Отчетность
		Аудиторные занятия				
		Ауд. зан.	Лекция	Практ.		
Basic Pharmacology V сем.	120	60	24	36	60	Экзамен
Количество экзаменационных тестов		250				

Выступили: 1. Ст преп. Исмаилов И.Дж. 2. Ст. Преп Умурзакова Г.И., которые единогласно поддержали количество, структуру и содержание экзаменационных тестовых вопросов по предметам кафедры.

Решили:

1. Утвердить экзаменационные тестовые вопросы по предметам кафедры за осенний семестр 2022-2023 учебного года.
2. Утвердить обращение кафедры на имя УМС факультета.

Постановили:

1. Принять к сведению выступление зав. кафедрой Момуновой А.А..:
2. Рекомендовать обращение кафедры на рассмотрения УМС факультета.
3. Ходатайствовать перед Учебно-методическим Советом факультета об утверждении экзаменационных тестовых вопросов по предметам кафедры за весенний семестр 2022-2023 учебного года:

Председатель: Момунова А.А. подпись / _____ /

Секретарь: Гарипова Н. подпись / _____ /

Спецификация банка тестовых заданий

№	Наименование разделов содержания дисциплины (Л+ПР+СРС)	Количество часов (Л+ПР+СРС)	Удельный вес в %	Количество тестовых заданий	Когнитивные уровни, %		
					Запоми-нание	Понима-ние	Приме-нение
1.	Drugs affecting on Respiratory system	8	9	22	15	5	2
2.	Drugs affecting on G.I.T.	8	9	22	15	5	2
3.	Antihypertensive drugs	4	4	10	7	2	1
4.	Diuretics	8	9	22	15	5	2
5.	Drugs for CHF.	5	5	12	8	3	1
6.	Antianginal drugs	6	6	14	10	3	1
7.	Antiarrhythmic drugs	5	5	12	8	3	1
8.	Drugs affecting blood formation. Drugs affecting the blood coagulation.	7	7	18	12	4	2
9.	Drugs affecting the blood coagulation.	7	7	18	12	4	2
10.	NSAIDs, Antipyretic Agents	7	7	18	12	4	2
11.	Antibiotics (part #1) General considerations, Sulfonamides, Cotrimoxazole, Quinolones B-lactam antibiotics	7	7	18	12	4	2
12.	Antibiotics (part #2) Tetracyclines, Chloramphenicole, Aminoglycozides, Macrolides	7	7	18	12	4	2
13.	Antimycobacterial Agents	7	7	18	12	4	2
14.	Antileprotic, Antifungal	7	7	18	12	4	2
15.	Antimalarial Agents	4	4	10	7	2	1
16.	Antiviral drugs	7	7	18	12	4	2
17.	Antiprotozoal Agents, Anthelmintic Agents	7	7	18	12	4	2
	Итого	90	100%	320	175	50	10

*Шкала оценки: 60 и менее - «неудовлетворительно»
61-73 - «удовлетворительно»
74-86 - «хорошо»
87-100 - «отлично»

ПАСПОРТ ФОНДА ТЕСТОВЫХ ЗАДАНИЙ

Направление подготовки (специальность): 560001 GM

Дисциплина: Базисная фармакология

№	*Наименование разделов содержания дисциплины*	*Контролируемыен компетенции*	Кол-во тестовых вопросов
1.	Drugs affecting on Respiratory system	ИК-2, ПК-17, ПК-19, ПК-31	22
2.	Drugs affecting on G.I.T.	ИК-2, ПК-18, ПК-19, ПК-31	22
3.	Antihypertensive drugs	ИК-2, ПК-17, ПК-18, ПК-31	10
4.	Diuretics	ИК-2, ПК-17, ПК-18, ПК-19,	22
5.	Drugs for CHF.	ИК-2, ПК-18, ПК-19, ПК-31	12
6.	Antianginal drugs	ПК-17, ПК-18, ПК-19, ПК-31	14
7.	Antiarrhythmic drugs	ИК-2, ПК-18, ПК-19, ПК-31	12
8.	Drugs affecting blood formation. Drugs affecting the blood coagulation.	ИК-2, ПК-17, ПК-19, ПК-31	18
9.	Drugs affecting the blood coagulation.	ИК-2, ПК-17, ПК-18, ПК-31	18
10.	NSAIDs, Antipyretic Agents	ПК-17, ПК-18, ПК-19, ПК-31	18
11.	Antibiotics (part #1) General considerations, Sulfonamides, Cotrimoxazole, Quinolones B-lactam antibiotics	ИК-2, ПК-17, ПК-18, ПК-19,	18
12.	Antibiotics (part #2) Tetracyclines, Chloramphenicole, Aminoglycozides, Macrolides	ИК-2, ПК-17, ПК-18, ПК-19,	18
13.	Antimycobacterial Agents	ИК-2, ПК-17, ПК-19, ПК-31	18
14.	Antileprotic, Antifungal	ИК-2, ПК-17, ПК-18, ПК-31	18
15.	Antimalarial Agents	ИК-2, ПК-18, ПК-19, ПК-31	10
16.	Antiviral drugs	ПК-17, ПК-18, ПК-19, ПК-31	18
17.	Antiprotozoal Agents, Anthelmintic Agents	ИК-2, ПК-17, ПК-18, ПК-19,	18
	Итого		320

ORGANOTROPIC MEANS
SECTION I AGENTS AFFECTING THE RESPIRATORY ORGANS.

001. Specify an antitussive agent that, due to its local anesthetic effect, reduces the sensitivity of cough receptors:
a) Codeine phosphate
b) Bromhexine
c) Glaucine hydrochloride
d) Libexin

002. Specify a central antitussive agent with a narcotic type of action:
a) Codeine phosphate
b) Bromhexine
c) Glaucine hydrochloride
d) Libexin

003. Specify a central antitussive agent with a non-narcotic type of action:
a) Libexin
b) Codeine phosphate
c) Tusuprex
d) Ethylmorphine hydrochloride

004. Specify expectorants of reflex type of action:
a) Preparations of ipecacuanha and thermopsis
b) Proteolytic enzymes
c) Sodium bicarbonate and potassium iodide
d) Ambroxol and bromhexine

005. Specify an expectorant that irritates the stomach receptors:
a) Infusion of mouse grass
b) Bromhexine
c) Acetylcysteine
d) Glaucine hydrochloride

006. Specify the mucolytic agent:
a) Codeine phosphate
b) Bromhexine
c) Libexin
d) Tusuprex

007. Mucolytics from the group of proteolytic enzymes include all drugs except:
a) Trypsin crystal
b) Chymotrypsin
c) Carbocysteine
d) Deoxyribonuclease

008. The destruction of disulfide bonds of sputum proteoglycans is characteristic of all drugs except:
a) Acetylcysteine
b) Ambroxol
c) Deoxyribonuclease
d) Bromhexine

009. Specify the agent that directly activates the respiratory center:
a) Bemegrid
b) Cytitone
c) Lobelin
d) Dibazole

010. Which of the following means refers to respiratory stimulants of reflex action:
a) Caffeine
b) Etymizole
c) Cytitone
d) Bemegrid

011. Respiratory stimulants of a mixed type of action include:
a) Caffeine
b) Cordiamine
c) Lobelin
d) Etymizole

012. Specify a bronchodilator of myotropic action:
a) Cromoline sodium
b) Ipratropium bromide
c) Salbutamol
d) Euphyllin

013. Specify a remedy from the group of M-holinoblockers for the prevention of asthma attacks:
a) Cromoline sodium
b) Ipratropium bromide
c) Salbutamol
d) Euphyllin

014. Which bronchodilator is characterized by an activating effect on beta2-adrenergic receptors:
a) Metacin
b) Salbutamol
c) Theophylline
d) Ketotifen

015. Which of the side effects is characteristic of the non-selective beta-adrenomimetic isadrin:
a) Depression of the respiratory center
b) Tachycardia
c) Constriction of peripheral vessels
d) Dryness of mucous membranes

016. Specify a bronchodilator belonging to the group of sympathomimetics:
a) Izadrin
b) Ephedrine
c) Atropine sulfate
d) Salbutamol

017. Specify a drug for the treatment of bronchial asthma from the group of glucocorticoids:
a) Beclomethasone dipropionate
b) Cromoline sodium
c) Theophylline
d) Diphenhydramine

018. Specify a remedy for the prevention of exacerbation of bronchial asthma, reducing inflammatory phenomena in the bronchi:
a) Cromoline sodium
b) Ipratropium bromide
c) Salbutamol
d) Euphyllin

019. What side effects are characteristic of eufillin:
a) Bradycardia
b) Increased myocardial oxygen demand c) Respiratory depression d) Increased blood pressure

020. Which of the following drugs is an inhibitor of 5-lipoxygenase involved in the synthesis of leukotrienes:
a) Prednisone
b) Acetylsalicylic acid
c) Zileutin
d) Zafirlukast

021. Specify the leukotriene receptor blocker drug:
a) Zileutin
b) Diprazine

c) Zafirlukast
d) Prednisone
022. To reduce foaming in the respiratory tract with pulmonary edema, use:
a) Adrenaline
b) Ethyl alcohol
c) Ketotifen
d) Morphine
023. In order to reduce the volume of circulating blood in pulmonary edema, use:
a) Spironolactone
b) Furosemide
c) Diacarb
d) Triamterene
024. In the complex therapy of pulmonary edema, use:
a) Prednisone
b) Morphine hydrochloride
c) Euphyllin
d) All of the above
025. The positive effect of ganglioblockers in pulmonary edema is due to:
a) Diuretic effect
b) Reduction of pressure in the small circle of blood circulation
c) Psychotropic effect
d) Anti-foaming effect

SECTION II CARDIOTONIC DEVICES

001. Cardiotonic drugs include drugs:
a) Activating the vasomotor center
b) Reducing the contractile activity of the myocardium
c) Enhancing the contractile activity of the myocardium
d) All of the above is true
002. Cardiotonics of glycoside structure include all drugs except:
a) Celanide
b) Strophanthin K
c) Amrinone
d) Digitoxin
003. A non-glycoside cardiotonic is:
a) Digoxin
b) Dobutamine
c) Corglycone
d) Mezaton
004. The sugary part (glycone) in the cardiac glycosides molecule determines:
a) Cardiotropic effect
b) Pharmacokinetic properties
c) Toxic properties
d) All of the above
005. The aglycone in the cardiac glycoside molecule determines:
a) The degree of binding to plasma proteins
b) The rate of penetration through cell membranes
c) Cardiotropic effect
d) The rate of elimination from the body
006. Specify the pure glycoside of purple foxglove:
a) Digoxin
b) Digitoxin
c) Celanide
d) Corglycone
007. Specify the pure glycoside of woolly foxglove:
a) Digoxin
b) Digitoxin
c) Corglycone
d) Strophanthin
008. Specify the novogalene preparation of the May lily of the valley:
a) Celanide
b) Strophanthin
c) Korglikon
d) Digitoxin
009. Specify the preparation of the spring flower:
a) Korglikon
b) Strophanthin
c) Celanide
d) Adoniside
010. What effects are characteristic of cardiac glycosides:
a) Positive inotropic, chronotropic, dromotropic and bathmotropic effects, increased myocardial oxygen demand
b) Positive inotropic, tonotropic and bathotropic, negative chronotropic and dromotropic effects
c) Positive inotropic and chronotropic, negative dromotropic and bathotropic effects
d) Negative inotropic, chronotropic and dromotropic, positive bathotropic effects
011. The use of cardiac glycosides in patients with heart failure leads to:
a) An increase in the minute volume of blood circulation due to an increase in heart rate, a decrease in blood pressure, an increase in venous pressure
b) Increase in minute volume of blood circulation, decrease in tachycardia, normalization of blood pressure, increase in diuresis, decrease in venous congestion
c) Decrease in minute volume of blood circulation, tachycardia, decrease in blood pressure
d) an increase in the minute volume of blood circulation, a decrease in tachycardia, normalization of blood pressure; diuresis and the amount of venous pressure are not affected
012. The positive inotropic effect of cardiac glycosides is due to:
a) Inhibition of the enzyme phosphodiesterase
b) Blockade of sulfhydryl groups of sodium-potassium ATPASE and a decrease in its functional activity
c) Stimulation of beta-adrenergic receptors of the heart
d) Increased tone of sympathetic links of the autonomic nervous system
013. The following cardiac glycoside has the most pronounced positive inotropic effect:
a) Digitoxin
b) Celanide
c) Digoxin
d) Strophanthin
014. What is the reason for the positive effect of cardiac glycosides in tachyarrhythmias:
a) Positive inotropic effect
b) Positive tonotropic effect
c) Negative chronotropic and dromotropic action

d) Positive bathotropic action
015. Where cardiac glycosides are mainly deposited:
a) In the heart muscle
b) In the liver
c) In adipose tissue
d) In blood plasma
016. The best absorption from the gastrointestinal tract is characterized by:
a) Strophanthin
b) Corglycone
c) Digoxin
d) Digitoxin
017. Which drugs are not used enterally:
a) Digoxin and celanide
b) Digitoxin and adoniside
c) Strophanthin and corglycone
d) All of the above
018. Cardiotonic effect develops most rapidly with intravenous administration:
a) Corglycone
b) Celanide
c) Digoxin
d) Digitoxin
019. Cumulation is least characteristic of the following cardiac glycoside:
a) Strophanthin
b) Digoxin
c) Digitoxin
d) Celanide
020. Indications for the use of cardiac glycosides are:
a) Coronary heart disease
b) Acute and chronic heart failure
c) Hypertension
d) Atherosclerosis
021. Cardiac signs of intoxication with cardiac glycosides include:
a) Extrasystole
b) Atrioventricular
block c) Atrial flicker and flutter
d) All of the above
022. The main extracardial signs of intoxication with cardiac glycosides include:
a) Agranulocytosis, thrombocytopenia
b) Color perception disorder, nausea, vomiting, muscle weakness
c) Stomatitis, hyperplastic gingivitis
d) Extrapyramidal disorders
023. For the treatment of arrhythmias caused by cardiac glycosides, use:
a) Diphenine, lidocaine
b) Novocainamide
c) Verapamil
d) Anaprilin
024. For the reactivation of sodium-potassium ATPASE during intoxication with cardiac glycosides, the following is used:
a) Disodium salt EDTA
b) Unithiol
c) Potassium Chloride
d) Atropine
025. Disodium salt EDTA is used for intoxication with cardiac glycosides for the purpose of:
a) Correction of hypokalemia
b) Binding of excess amounts of calcium ions
c) Donating of sulfhydryl groups and reactivation of sodium-potassium ATPASE
d) Binding of excessive amounts of cardiac glycosides

SECTION III ANTIARRHYTHMIC AGENTS

001. With adrenergic stimulation of the heart, the following effects are observed:
a) Increased automatism and speed of conduction in all departments of the conducting system, shortening of the effective refractory period
b) Increasing the automatism and speed of conducting in all departments of the conducting system, lengthening the effective refractory period
c) Reduction of automatism and speed of conducting in all departments of the conducting system, shortening of the effective refractory period
d) Reduction of automatism and speed of conducting in all departments of the conducting system, lengthening of the effective refractory period
002. With cholinergic stimulation of the heart, the following effects are observed:
a) Increased automatism and speed of conduction in all departments of the conducting system, prolongation of the effective refractory period
b) Decrease in automatism, decrease in the speed of conduction through the conductive system of the heart, shortening of the effective refractory period with the sinus node and lengthening – in the atrio-ventricular node
c) Increase in automatism and speed of conduction in all departments of the conductive system, shortening of the effective refractory period
d) Decrease in automatism, increase in the speed of conduction through the conductive system of the heart, shortening effective refractory period in the sinus and atrio-ventricular node
003. Specify the antiarrhythmic drug belonging to group IA:
a) Amiodarone
b) Anaprilin
c) Verapamil
d) Quinidine
004. Укажите антиаритмик, относящийся к IB группе:
a) Amiodarone
b) Lidocaine
c) Verapamil
d) Quinidine
005. Specify the antiarrhythmic drug belonging to the IC group:
a) Anaprilin
b) Lidocaine
c) Encainide
d) Diphenine
006. Specify the antiarrhythmic drug belonging to group II:
a) Verapamil
b) Anaprilin
c) Lidocaine
d) Etmosine
007. Specify the antiarrhythmic drug belonging to group III:

a) Amiodarone
b) Flecainide
c) Quinidine
d) Anaprilin
008. Specify the antiarrhythmic drug belonging to group IV:
a) Lidocaine
b) Encainide
c) Diphenine
d) Verapamil
009. Note the correct statement – I group of "true" antiarrhythmics is:
a) Calcium channel blocking agents
b) Drugs that block potassium channels
c) Drugs that inhibit adrenergic effects on the heart
d) Membrane stabilizing agents
010. Note the correct statement – the II group of "true" antiarrhythmics is:
a) Calcium channel blocking agents
b) Drugs that block potassium channels
c) Drugs that inhibit adrenergic effects on the heart
d) Membrane stabilizing agents
011. Which of these antiarrhythmic sodium channel blockers significantly reduces the contractile activity of the myocardium:
a) Quinidine sulfate
b) Lidocaine
c) Diphenine
d) Flecainide
012. Specify a remedy for atrioventricular blockade:
a) Anaprilin
b) Lidocaine
c) Amiodarone
d) Atropine
013. Specify the drug, the indications for the appointment of which are ventricular arrhythmias:
a) Verapamil
b) Corglycone
c) Lidocaine
d) Atropine
014. Which of these drugs is not used for the treatment of supraventricular arrhythmias:
a) Verapamil
b) Anaprilin
c) Amiodarone
d) Diphenine
015. Specify the drug of choice for arrhythmias caused by an overdose of cardiac glycosides:
a) Metoprolol
b) Phenigidine
c) Diphenine
d) Quinidine sulfate
016. Which of these calcium channel blockers have antiarrhythmic activity:
a) Phenigidine and nimodipine
b) Verapamil and cinnarizine
c) Verapamil and diltiazem
d) Flunarizine and verapamil
017. Which of the side effects is not typical for anaprilin:
a) blockage of the pulse through the conduction system of the heart
b) Weakening of the force of heart contractions
c) Increase in the tone of the smooth muscles of the bronchi
d) Increase in blood pressure
018. Specify antiarrhythmic drugs, phenothiazine derivatives:
a) Propafenone and flecainide
b) Diphenine and novocainamide
c) Etmosine and etacizine
d) Lidocaine and mexiletine

SECTION IV ANTIANGINAL AGENTS

001. For the treatment of coronary heart disease, drugs are used that:
a) Improve coronary blood flow
b) Reduce myocardial oxygen demand c) Improve energy processes in cardiomyocytes
d) All of the above
002. Which of the following preparations does not belong to the group of organic nitrates:
a) Nitroglycerin
b) Sustak
c) Isosorbide mononitrate
d) Metoprolol
003. coronarorextensive agents of myotropic action include:
a) Anaprilin
b) Verapamil
c) Nitroglycerin
d) Dipyridamole
004. An antianginal drug of reflex action is:
a) Nitroglycerin
b) Amiodarone
c) Validol
d) Dipyridamole
005. Specify the prolonged-acting nitroglycerin preparation:
a) Phenigidine
b) Sustak
c) Nitroglycerin
d) Nitrosorbide
006. Specify a preparation from the group of organic nitrates that is not a preparation of nitroglycerin:
a) Sustak
b) Trinitrolong
c) Erinite
d) Nitrong
007. Specify an antianginal calcium antagonist drug:
a) Sustak
b) Erinite
c) Fenigidine
d) Anaprilin
008. Specify the antianginal drug - beta-blocker:
a) Sustak
b) Erinite
c) Phenigidine
d) Anaprilin
009. Preparations from the group of organic nitrates have an antianginal effect due to:
a) Reduction of heart function due to direct cardiodepressive effect and reduction of myocardial oxygen demand
b) Dilation of coronary vessels and increase in oxygen delivery to cardiomyocytes

c) Decrease in heart function due to a decrease in afterload and myocardial oxygen
demand
d) Decrease in heart function due to a decrease in preload and myocardial oxygen demand, as well as an increase in oxygen delivery to cardiomyocytes
010. Drugs from the group of beta-blockers have an antianginal effect due to:
a) Reduction of heart function due to direct cardiodepressive effect and reduction of myocardial oxygen demand
b) Dilation of coronary vessels and increase in oxygen delivery to cardiomyocytes
c) Decrease in heart function due to a decrease in afterload and myocardial oxygen
demand d) Decrease in heart function due to a decrease in preload and myocardial oxygen demand
011. Calcium channel blocker fenigidine implements an antianginal effect due to:
a) Decrease in heart function due to a decrease in afterload and myocardial oxygen demand, as well as an increase in oxygen delivery to cardiomyocytes
b) A decrease in heart function due to direct cardiodepressive action and a decrease in myocardial oxygen
demand
c) A decrease in heart function due to a decrease in preload and myocardial oxygen
demand
d) Reflex expansion of coronary vessels and an increase in oxygen delivery to cardiomyocytes
012. After sublingual administration, the effect of nitroglycerin develops after:
a) 2-3 minutes
b) 5-10 minutes
c) 15-20 minutes
d) 30 minutes
013. The effect of nitroglycerin after a single dose continues:
a) 5-10 minutes
b) 15-20 minutes
c) About 30 minutes
d) About 1 hour
014. Which group of antianginal agents is characterized by a relatively rapid development of addiction:
a) Organic nitrates
b) Calcium antagonists
c) Amiodarone
d) Beta-blockers
015. Nitroglycerin, along with antianginal, is characterized by the following effects:
a) Headaches, decreased blood pressure, tachycardia
b) Bradycardia, decreased blood pressure, headaches
c) Agitation, sore throat, muscle trembling
d) Lethargy, paresthesia, redness of the face
016. Beta-blockers of indiscriminate action used in angina pectoris include:
a) Metoprolol
b) Propranolol
c) Atenolol
d) Labetalol
017. Specify the side effects characteristic of anaprilin:
a) Increased bronchial tone
b) Deterioration of peripheral blood circulation
c) Atrio-ventricular blockade
d) All of the above
018. Which antianginal drug is characterized by the presence of antiplatelet properties in addition to the coronary dilating effect, which also has a positive effect in coronary heart disease:
a) Verapamil
b) Anaprilin
c) Validol
d) Dipyridamole
019. Dipyridamole is characterized by the following adverse effect:
a) Aftereffect phenomenon
b) The phenomenon of recoil
c) Stealing syndrome
d) Extrapyramidal disorders
020. Irritation of the receptors of the oral mucosa, causing a reflex improvement in myocardial blood supply is characteristic of:
a) Nitroglycerin
b) Phenigidine
c) Validol
d) Verapamil
021. To prevent the occurrence of angina attacks, use:
a) Nitroglycerin, validol, sustak
b) Nitroglycerin, verapamil, amiodarone
c) Sustak, verapamil, nitrong
d) Validol, anaprilin, fenigidine
022. In order to detect latent coronary insufficiency in the diagnosis of coronary heart disease, use:
a) Nitroglycerin
b) Dipyridamole
c) Anaprilin
d) Verapamil
023. To relieve pain syndrome in myocardial infarction, use:
a) Narcotic analgesics and fluorotane
b) Narcotic analgesics and nitrous oxide
c) Ether for anesthesia
d) Non-narcotic analgesics
024. The following groups of medications are used for the treatment of myocardial infarction, except:
a) Antiarrhythmic drugs
b) Antiplatelet agents and fibrinolytics
c) Peripheral vasodilators
d) Anticholinesterase agents

SECTION V ANTIHYPERTENSIVE AGENTS

001. Blood pressure depends on the following factors:
a) Heart function
b) Peripheral vascular tone
c) Circulating blood volume
d) All of the above
002. Neurotropic antihypertensive agents of central action include:
a) Prazosin
b) Clonidine
c) Octadine
d) All of the above

003. Specify the ganglioblocker used in hypertension therapy:
a) Apressin
b) Guanfacine
c) Benzohexonium
d) Metoprolol
004. Which of the following drugs belongs to the group of sympatholytics:
a) Dibazole
b) Tropafen
c) Octadine
d) Clofelin
005. Specify the alpha-adrenoblocker blocking postsynaptic alpha1-adrenoreceptors:
a) Tropafen
b) Prazosin
c) Reserpine
d) Minoxidil
006. Which of these blockers blocks both postsynaptic and presynaptic a-adrenoreceptors (non-selective a-adrenoblocker):
a) Terazosin
b) Phentolamine
c) Prazosin
d) Tamsulosin
007. Specify the drug – a non-selective blocker of beta1- and beta2-adrenergic receptors:
a) Labetalol
b) Anaprilin
c) Metoprolol
d) Atenolol
008. Which of these drugs blocks mainly beta1-adrenergic receptors:
a) Anaprilin
b) Atenolol
c) Labetalol
d) Oxprenolol
009. Alpha, beta blockers include:
a) Labetalol
b) Metoprolol
c) Phenigidine
d) Verapamil
010. Angiotensin converting enzyme inhibitors include:
a) Captopril
b) Enalapril
c) Lisinopril
d) All of the above
011. Specify the angiotensin receptor blocker:
a) Captopril
b) Phentolamine
c) Reserpine
d) Losartan
012. Which of the following drugs refers to calcium channel blockers:
a) Dibazole
b) Anaprilin
c) Phenigidine
d) Clofelin
013. Specify the potassium channel activator drug:
a) Diltiazem
b) Minoxidil
c) Talinolol
d) Magnesium sulfate
014. Which drug is a diuretic for the complex therapy of hypertension:
a) Losartan
b) Dichlotiazide
c) Captopril
d) Prazosin
015. Peripheral vasodilators, nitric oxide donors, include:
a) Dibazole
b) Magnesium sulfate
c) Sodium nitroprusside
d) Spironolactone
016. The antihypertensive effect of clofelin is due to:
a) Blockade of alpha2-adrenergic receptors in the medulla oblongata
b) Stimulation of alpha2-adrenoreceptors and I1-imidazoline receptors in the medulla oblongata
c) Direct myotropic antispasmodic effect on peripheral vascular myocytes
d) Blockade of beta1-adrenoreceptors of the heart
017. Specify the side effect characteristic of clonidine:
a) Extrapyramidal disorders
b) Sedative and hypnotic effect
c) Agranulocytosis
d) Dry cough
018. For controlled hypotension during surgical operations, use:
a) Ganglioblockers - hygronium and arfonade
b) Beta-blockers – anaprilin and metoprolol
c) M-cholinoblockers – atropine and platyphylline
d) Means of central action – clofelin and methyldofa
019. The sympatholytic octadine is characterized by the following:
a) Activation of the vagus nerve centers
b) Depletion of norepinephrine reserves at the presynaptic termination
c) Blockade of postsynaptic adrenoreceptors
d) Blockade of histamine receptors
020. In hypertension, beta-blockers are used for the purpose of:
a) Peripheral vasodilation and reduction of total peripheral vascular resistance
b) Decrease in circulating blood volume
c) Decrease in heart function and decrease in cardiac output
d) Reducing the tone of vasomotor centers
021. An endogenous substance that causes peripheral vascular constriction and the release of aldosterone from the adrenal glands is:
a) Angiotensinogen
b) Angiotensin I
c) Angiotensin II
d) Angiotensin converting enzyme
022. The most effective point of pharmacological action on the renin-angiotensin-aldosterone system is:
a) Blockade of renin production
b) Inhibition of angiotensin converting enzyme
c) Blockade of angiotensin II receptors
d) Inhibition of renin activity
023. Specify a prolonged-acting calcium channel blocker:

a) Phenigidine
b) Felodipine
c) Isradipine
d) Verapamil
024. Which of these angiotensin-converting enzyme inhibitors is not a prodrug:
a) Captopril
b) Enalapril
c) Fosinopril
d) Trandolapril
025. A competitive antagonist of angiotensin II receptors – losartan, has the following effects:
a) Reduces total peripheral resistance
b) Reduces the content of aldosterone in the blood, has a diuretic (natriuretic) effect
c) Increases the excretion of uric acid from the body
d) All of the above
026. Potassium channel activators minoxidil and diazoxide cause peripheral vascular dilation due to:
a) Opening of potassium channels, the release of potassium from the cell, hyperpolarization and reduction of calcium intake necessary to maintain tone in the cell
b) Opening of potassium channels, which leads to impaired potassium reabsorption in the renal tubules
c) Binding of excess amounts of potassium inside the cell
d) Increase the production of nitrogen oxide
027. The hypotensive effect of diuretics in hypertension is associated with:
a) A decrease in the tone of vasomotor centers
b) Blockade of nerve impulse transmission in the autonomic ganglia
c) Decrease in circulating blood volume and decrease in sodium ions in the vascular endothelium
d) Decrease in the activity of the renin-angiotensin-aldosterone system
028. Magnesium sulfate causes a decrease in blood pressure due to:
a) Direct myotropic effect on vascular smooth muscles
b) Blockade of the autonomic ganglia
c) Suppression of the tone of vasomotor centers
d) All of the above

SECTION VI HYPERTENSIVE AGENTS

001. The main causes of acute decrease in blood pressure are:
a) Acute heart failure
b) Vascular collapse
c) All of the above
d) None of the above
002. The main task in shock therapy is:
a) Increase in blood pressure
b) Increased vascular tone
c) Increased cardiac output
d) Restoration of insufficient blood supply to organs and tissues
003. The means that increase cardiac output include:
a) Norepinephrine hydrotartrate
b) Epinephrine hydrochloride
c) Mezaton
d) Angiotensinamide
004. Specify a synthetic adrenomimetic that increases the tone of peripheral vessels:
a) Epinephrine hydrochloride
b) Norepinephrine hydrothartrate
c) Mezaton
d) Angiotensinamide
005. Specify the vasopressor agent, which is a derivative of an endogenous substance:
a) Mezaton
b) Angiotensinamide
c) Ephedrine
d) Galazolin
006. Angiotensinamide implements its vasopressor effect by activating:
a) Adrenoreceptors
b) Cholinergic
receptors c) Dopamine receptors
d) Angiotensin receptors
007. A common undesirable effect of vasopressors is:
a) Increased blood pressure
b) Increased cardiac output
c) Violation of blood supply to peripheral tissues
d) Retention of sodium and water in the body
008. To increase blood pressure, if the pumping function of the heart is insufficient, use:
a) Ganglioblockers
b) Peripheral vasoconstrictors
c) Cardiotonic agents
d) Diuretics
009. Cardiotonics of glycoside structure include:
a) Dopamine
b) Strophanthin
c) Dobutamine
d) Epinephrine hydrochloride
010. Specify a non-glycoside cardiotonic:
a) Digoxin
b) Dobutamine
c) Corglycone
d) Celanide
011. Dopamine, when administered in small doses, acts mainly on:
a) a-adrenoreceptors of blood vessels, which causes their narrowing
b) Dopamine receptors of renal and mesenteric vessels, which causes their expansion
c) Beta1-adrenoreceptors of the heart, which leads to an increase in its work
d) All of the above is true
012. In hypotension with hypovolemia, it is necessary to use:
a) Cardiotonics
b) Peripheral vasodilators
c) Plasma substitutes
d) Diuretics
013. With chronic hypotension, you can use:
a) Plasma substitutes
b) Analeptics and general ionizing agents
c) Diuretics
d) Peripheral vasodilators

SECTION VII REMEDIES FOR DISORDERS OF CEREBRAL CIRCULATION AND MIGRAINE.

001. Specify a remedy that improves cerebral circulation from the group of antiplatelet agents:
a) Heparin
b) Phenylin
c) Acetylsalicylic acid
d) Nicergoline
002. Which drug belongs to anticoagulants and is used to treat disorders of cerebral circulation:
a) acetylsalicylic acid
b) Cinnarizine
c) Aminalon
d) Heparin
003. Drugs that increase cerebral blood flow from the group of calcium channel blockers include:
a) Aminalon and picamilon
b) Nimodipine and cinnarizine
c) Syncumar and phenylin
d) Nicergoline and vinpocetine
004. Specify the drug – a derivative of periwinkle alkaloids:
a) Nicergoline
b) Sinkumar
c) Cinnarizine
d) Vinpocetine
005. Specify the preparation – derivative of ergot alkaloids:
a) Nicergoline
b) Sinkumar
c) Cinnarizine
d) Vinpocetine
006. Vitamin PP derivatives for the treatment of cerebral circulation disorders include:
a) Nicergoline
b) Xanthinol nicotinate
c) Vinpocetine
d) Aminalon
007. A derivative of purine alkaloids for the treatment of cerebral circulatory insufficiency is:
a) Nimodipine
b) Flunarizine
c) Pentoxifylline
d) Picamilon
008. Isoquinoline derivatives include:
a) Cinnarizine
b) Vinpocetine
c) Papaverine hydrochloride
d) Xanthinol nicotinate
009. Specify the combined preparation of nicotinic acid and papaverine:
a) Nikoshpan
b) Xanthinol nicotinate
c) Nicoverine
d) Picamilon
010. What is mainly due to the positive effect of GABA derivatives in disorders of cerebral circulation:
a) Decrease in vascular permeability
b) Improvement of metabolic processes in neurons
c) Narrowing of cerebral vessels
d) Increased intracranial pressure
011. Specify the mechanism of action of nicergoline:
a) Expansion of cerebral vessels and improvement of cerebral circulation
b) Narrowing of peripheral vessels and increased blood pressure
c) Antioxidant effect
d) Activation of the respiratory system and improvement of the blood oxygenation process
012. Migraine is a disease associated with:
a) Thrombosis of cerebral vessels
b) Hemorrhage into the brain substance
c) Dysfunction of the regulation of the tone of cerebral vessels
d) Tumor process in the brain
013. The following indole derivative is used to relieve acute migraine attacks:
a) Paracetamol
b) Sumatriptan
c) Metoclopramide
d) Ibuprofen
014. Ergot alkaloids for relieving a migraine attack include:
a) Sumatriptan
b) Ergotamine
c) Naproxen
d) Indomethacin
015. To prevent the occurrence of migraine attacks, the following tricyclic compound is used:
a) Pisotifen
b) Sumatriptan
c) Anaprilin
d) Dihydroergotamine
016. Lysergic acid derivative for the prevention of migraine attacks is:
a) Naproxen
b) Paracetamol
c) Metisergide
d) Carbamazepine
017. Tricyclic antidepressants used to prevent migraine attacks include:
a) Indomethacin
b) Amitriptyline
c) Sumatriptan
d) Ergotamine
018. The following antiepileptic drug can be used for migraines:
a) Carbamazepine
b) Naproxen
c) Metoclopramide
d) Metisergid
019. The mechanism of action of sumatriptan is associated with:
a) Blockade of alpha-adrenergic receptors
b) Activation of central beta-adrenergic receptors
c) Activation of central serotonin 5-HT1D receptors
d) Blockade of central M-cholinergic receptors
020. The mechanism of action of metisergide consists in:
a) Blockade of central serotonin 5-HT2 receptors
b) Blockade of central a-adrenoreceptors
c) Blockade of central M-cholinergic receptors
d) Activation of central dopamine D2 receptors

SECTION VIII MEANS AFFECTING THE DIGESTIVE ORGANS: SECRETION OF THE

STOMACH AND PANCREAS. GASTROPROTECTORS, ANTI-ULCER DRUGS.

001. Which of the following drugs is not a stimulant of gastric gland secretion:
a) Pentagastrin
b) Histamine
c) Gastrin
d) Pepsin

002. Specify the means of substitution therapy for gastric gland insufficiency:
a) Histamine
b) Pentagastrin
c) Diluted hydrochloric acid
d) Misoprostol

003. Specify the antisecretory agent – histamine H2-receptor blocker:
a) Pyrenzepine
b) Ranitidine
c) Omeprazole
d) Benzohexonium

004. Specify the antisecretory agent – proton pump blocker
a) Pyrenzepine
b) Ranitidine
c) Omeprazole
d) Benzohexonium

005. Which of the antisecretory agents blocks M1-cholinergic receptors:
a) Atropine sulfate
b) Pyrilene
c) Benzohexonium
d) Pyrenzepine

006. A synthetic derivative of prostaglandins is:
a) Omeprazole
b) Misoprostol
c) Famotidine
d) Proglumide

007. Specify an antisecretory agent that has antiandrogenic activity and inhibits microsomal oxidation:
a) Atropine sulfate
b) Pyrenzepine
c) Cimetidine
d) Omeprazole

008. Sulfenamide is an active metabolite of the following antisecretory agent:
a) Pyrenzepine
b) Omeprazole
c) Cimetidine
d) Famotidine

009. In the absence of an acidic environment , the following antisecretory agent is inactive:
a) Ranitidine
b) Pirenzepine
c) Omeprazole
d) Atropine sulfate

010. What is meant by the concept of "antacids":
a) Drugs that inhibit the secretion of HCl by the parietal cells of the stomach
b) Bases that react chemically with HCl and neutralize it
c) Agents that create mechanical protection of the gastric mucosa
d) Agents that enhance the formation of gastric mucus

011. Which of the antacids can cause relaxation:
a) Magnesium oxide
b) Aluminum hydroxide
c) Calcium carbonate
d) Sodium bicarbonate

012. Which of the antacids can cause constipation:
a) Magnesium oxide
b) Aluminum hydroxide
c) Calcium carbonate
d) Sodium bicarbonate

013. Which of the antacids can cause systemic alkalosis:
a) Magnesium oxide
b) Aluminum hydroxide
c) Calcium carbonate
d) Sodium bicarbonate

014. Specify the most optimal combination of antacids:
a) Magnesium oxide and sodium bicarbonate
b) Aluminum hydroxide and magnesium oxide
c) Calcium carbonate and sodium bicarbonate
d) Sodium bicarbonate and aluminum hydroxide

015. Which of these means increases the formation of mucus in the stomach:
a) Almagel
b) Misoprostol
c) Acetylsalicylic acid
d) Bismuth citrate basic

016. Specify the drug from the group of gastroprotectors:
a) Famotidine
b) Omeprazole
c) Sucralfate
d) Pyrenzepine

017. Which of the gastroprotectors forms a film on the ulcerative defect:
a) Carbenoxolone
b) Misoprostol
c) Magnesium trisilicate
d) Bismuth subcitrate

018. Specify the drug that inhibits the vital activity of N. Pylori in the ulcerative defect:
a) Almagel
b) Misoprostol
c) Magnesium oxide
d) Bismuth citrate basic

019. Specify a remedy with anti-enzyme activity in acute pancreatitis:
a) Pentagastrin
b) Pancreatin
c) Festal
d) Trasylene

020. Specify the means of substitution therapy for chronic pancreatitis:
a) Pentagastrin
b) Pancreatin
c) Diluted hydrochloric acid
d) Trasylene

SECTION IX MEANS AFFECTING APETITIS, MOTILITY OF THE STOMACH AND INTESTINES. CHOLERETIC AGENTS

001. Specify an appetite enhancer:
a) Wormwood tincture
b) Dezopimone
c) Mazindol
d) Fenfluramine

002. Specify the phenylalkylamine derivative that suppresses appetite:
a) Mazindol
b) Fepranone
c) Insulin
d) Aminazine

003. Which of the appetite suppressants, according to the mechanism of action, refers to the means acting on the serotonergic system:
a) Mazindol
b) Fenfluramine
c) Fepranone
d) Dezopimone

004. What side effects are characteristic of anorexigenic drugs that affect the catecholaminergic system:
a) Drowsiness and depression
b) Anxiety, sleep disturbance, tachycardia, increased blood pressure
c) Bradycardia, irritation of the gastrointestinal mucosa
d) Suppression of hematopoiesis

005. With increased gastric motility, the following groups of drugs are used, except:
a) M-holinoblockers
b) Myotropic antispasmodics
c) Prokinetics
d) Ganglioblockers

006. Specify a means to enhance the evacuation of stomach contents:
a) Atropine
b) Platyphylline
c) Metoclopramide
d) Metacin

007. Specify an emetic of central action:
a) Diprazine
b) Apomorphine hydrochloride
c) ipecacuanha preparations
d) Copper sulfate

008. What drugs are used to prevent vomiting caused by motion sickness:
a) Metoclopramide, cisapride
b) Aeron, diprazine, diphenhydramine
c) Aminazine, haloperidol
d) Ondansetron, tropisetron

009. Specify the mechanism of antiemetic action of metoclopramide:
a) Blockade of D2-dopamine and 5-HT3-serotonin receptors
b) Blockade of M-choline and alpha-adrenergic receptors c) Blockade of histamine H1 and H2 receptors
d) Stimulation of M-choline and alpha-adrenergic receptors

010. Which of the antiemetic drugs does not belong to neuroleptics – derivatives of phenothiazine:
a) Stagerazine
b) Haloperidol
c) Aminazine
d) Thiethylperazine

011. Specify the phenylpiperidine derivative used in acute and chronic diarrhea:
a) No-shpa
b) Phenolphthalein
c) Loperamide
d) Proserin

012. Which of the laxatives belongs to the group of inorganic substances:
a) Sodium chloride
b) Phenolphthalein
c) Sodium sulfate
d) Castor oil

013. Specify a synthetic laxative:
a) Castor oil
b) Magnesium sulfate
c) Sodium sulfate
d) Isafenin

014. Which of the laxatives contains anthraglycosides:
a) Isafenin
b) Buckthorn extract
c) Phenolphthalein
d) Castor oil

015. Specify the laxative used to treat acute constipation:
a) Magnesium sulfate
b) Castor oil
c) Isafenin
d) Buckthorn extract

016. What is the mechanism of action of saline laxatives:
a) Cause the formation of ricinolic acid, irritating intestinal receptors
b) Increase osmotic pressure in the intestinal lumen, which leads to a delay in water absorption, an increase in the volume of intestinal contents and irritation of intestinal mechanoreceptors
c) Released anthraglycosides irritate intestinal receptors
d) Stimulate parasympathetic ganglia, which leads to increased intestinal motility

017. Specify laxatives acting throughout the intestine:
a) Castor oil
b) Phenolphthalein
c) Isafenin
d) Infusion of senna leaves

018. Specify a laxative that acts mainly on the large intestine:
a) Castor oil
b) Magnesium sulfate
c) Sodium sulfate
d) Isafenin

019. Which of the laxatives is used to treat chronic constipation:
a) Phenolphthalein
b) castor oil
c) Magnesium sulfate

d) Glycerin candles
020. All drugs that stimulate the formation of bile include, except:
a) Dehydrocholic acid
b) Oxafenamide
c) Ondansetron
d) Holenzim
021. Specify a drug of plant origin that stimulates the formation of bile:
a) dehydrocholic acid
b) Cholenzyme
c) Holosas
d) Oxafenamide
022. Specify a synthetic drug that stimulates the formation and separation of bile:
a) dehydrocholic acid
b) Holenzim
c) Holosas
d) Oxafenamide
023. Which stimulator of bile formation refers to bile preparations:
a) Magnesium sulfate
b) Cholenzyme
c) Holosas
d) Oxafenamide
024. The means contributing to the separation of bile include:
a) Cycvalone
b) Magnesium sulfate
c) Cholenzyme
d) Holosas

SECTION X MEANS AFFECTING HEMATOPOIESIS

001. Specify the drug for the treatment of iron deficiency anemia:
a) Folic acid
b) Pentoxyl
c) Nitrous iron lactate
d) Cyanocobalamin
002. It is best absorbed in the gastrointestinal tract:
a) Divalent ionized iron
b) Trivalent ionized iron
c) Non-ionized iron
d) The degree of ionization does not affect the absorption of iron
003. Cyanocobalamin deficiency develops:
a) Macrocytic hyperchromic anemia
b) Megalocytic hyperchromic animia
c) Agranulocytosis
d) Lymphopenia
004. Folic acid deficiency develops:
a) Macrocytic hyperchromic anemia
b) Megalocytic hyperchromic pathology
c) Agranulocytosis
d) Lymphopenia
005. Specify the drug for the treatment of pernicious anemia:
a) Iron hydroxide
b) Pentoxyl
c) Iron lactate
d) Cyanocobalamin
006. Specify the cobalt preparation for the treatment of iron deficiency anemia:
a) Ferrum lek
b) Coamide
c) Epoetin alpha
d) Folic acid
007. Which of the drugs is a human recombinant growth factor of erythrocyte blood germ:
a) Molgramostim
b) Filgrastim
c) Epoetin alpha
d) Coamide
008. Specify a drug that enhances the absorption of iron from the intestine:
a) Cyanocobalamin
b) Pentoxyl
c) Ascorbic acid
d) Trilon B
009. Which of these preparations contains iron salt and ascorbic acid:
a) Ferkovene
b) Coamide
c) Ferroplex
d) Pentoxyl
010. Specify the preparation of iron for parenteral use:
a) Nitrous iron sulfate
b) Ferrum lek
c) Nitrous iron lactate
d) Ferroplex
011. The following side effect is characteristic of iron preparations:
a) Obstipation
b) Diarrhea
c) Agranulocytosis
d) Anemia
012. Which drug is a recombinant human granulocyte-macrophage colony stimulating factor:
a) Pentoxyl
b) Molgramostim
c) Sodium nucleinate
d) Mercaptopurine
013. Agents that inhibit erythropoiesis include:
a) Epoetin alpha
b) Sodium Phosphate (P32)
c) Sodium nucleinate
d) Ferrum lek
014. The means that inhibit leukopoiesis include:
a) Filgrastim
b) Sodium nucleinate
c) Novembichine
d) Pentoxyl

SECTION XI MEANS AFFECTING BLOOD CLOTTING

001. Which of the pharmacological groups does not belong to the means used for the prevention and treatment of thrombosis:
a) Antiplatelet agents
b) Anticoagulants
c) Antifibrinolytic agents
d) Fibrinolytic agents
002. Specify the antiplatelet agent:
a) Phenylin
b) Neodicoumarin
c) Acetylsalicylic acid

d) Heparin
003. Which of the antiplatelet agents by the mechanism of action refers to thromboxansynthase inhibitors:
a) Acetylsalicylic acid
b) Dasoxybene
c) Epoprostenol
d) Dipyridamole
004. Specify a direct-acting anticoagulant:
a) Phenylin
b) Neodicoumarin
c) Acetylsalicylic acid
d) Heparin
005. Specify the direct-acting anticoagulant used for blood preservation:
a) Sinkumar
b) Neodicoumarin
c) Sodium Citrate
d) Heparin
006. Specify the drug that inhibits the transition from prothrombin to thrombin:
a) Phenylin
b) Neodicoumarin
c) Acetylsalicylic acid
d) Heparin
007. Which of the drugs is low molecular weight heparin:
a) Sodium citrate
b) Heparin
c) Fraxiparin
d) Neodicumarin
008. The antagonist of heparin is:
a) Vikasol
b) Dicinone
c) Protamine sulfate
d) Calcium chloride
009. Which of the drugs is a direct-acting anticoagulant binding calcium ions:
a) Neodicoumarin
b) Sodium
Hydrocitrate c) Heparin
d) Phenylin
010. Specify an indirect anticoagulant, a derivative of 4-oxycoumarin:
a) Neodicoumarin
b) Trilon b
c) Phenylin
d) Heparin
011. What is the antagonist of anticoagulants of indirect action:
a) Vitamin E
b) Vitamin K
c) Vitamin D
d) Phenylin
012. Specify the mechanism of action of indirect anticoagulants:
a) Inhibition of the transition of prothrombin to thrombin
b) Inhibition of the synthesis of prothrombin and proconvertin in the liver
c) Inhibition of the transition of fibrinogen to fibrin
d) Dissolution of fibrin clots
013. Which of these drugs refers to fibrinolytic agents:
a) Heparin
b) Syncumar
c) Streptokinase
d) Protamine sulfate
014. Hemostatics for topical use include all drugs except:
a) Thrombin
b) Hemostatic sponge
c) Vikasol
d) Hydrogen peroxide solution
015. Specify the antifibrinolytic agent:
a) Streptodecase
b) Urokinase
c) Aminocaproic acid
d) Gelatin

CHEMOTHERAPEUTIC AGENTS
SECTION I GENERAL CONCEPTS OF ANTIBIOTIC THERAPY. CLASSIFICATION OF ANTIBIOTICS.

001. The basic principles of antibiotic therapy include the following:
a) An antibacterial drug should be prescribed taking into account the sensitivity of the causative agent of the disease
b) Treatment with antibacterial drugs should be started as early as possible after the onset of the disease
c) The dose of antibacterial drug should be prescribed, taking into account the severity of the disease in a particular patient
d) All of the above
002. Note antibiotics having a beta-lactam ring in their structure:
a) Penicillins
b) Cephalosporins
c) Carbapenems and monobactams
d) All of the above
003. Specify the drug related to macrolide antibiotics:
a) Neomycin
b) Doxycycline
c) Erythromycin
d) Cephaloridin
e)
004. Which of the antibiotics belongs to the group of monobactams:
a) Ampicillin
b) Bicillin-5
c) Aztreonam
d) Imipenem
005. Specify the antibiotic of the cephalosporin series:
a) Streptomycin
b) Cefaclor
c) Phenoxymethylpenicillin
d) Erythromycin
006. Which of the drugs is not an aminoglycoside:
a) Gentamicin
b) Streptomycin
c) Clindamycin
d) Neomycin
007. Cyclic polypeptides include:

a) Fusafunjin
b) Polymyxin
c) Azithromycin
d) Imipenem
008. Which of the mechanisms of action is not characteristic of any of the known groups of antibiotics:
a) Violation of intracellular protein synthesis
b) Violation of cell wall synthesis
c) Violation of RNA synthesis
d) Inhibition of cyclooxygenase
009. Which groups of antibiotics are characterized by a mechanism of action consisting in a violation of the synthesis of the cell wall:
a) Beta-lactam antibiotics
b) Tetracyclines
c) Aminoglycosides
d) Macrolides
010. Which of the antibiotics causes a violation of RNA synthesis:
a) Erythromycin
b) Rifampicin
c) Levomycetin
d) Imipenem
011. Which group of antibiotics violates the permeability of the cytoplasmic membrane of microorganisms:
a) Glycopeptides
b) Polymyxins
c) Tetracyclines
d) Cephalosporins

SECTION II BETA-LACTAM ANTIBIOTICS

001. Note the spectrum of action of biosynthetic penicillins:
a) Gram-positive and gram-negative cocci, causative agents of diphtheria, gas gangrene, spirochetes.
b) Causative agent of diphtheria, Mycobacterium tuberculosis
c) Gram-positive cocci, large viruses
d) Gram-negative cocci, rickettsias, yeast-like fungi
002. Specify a broad-spectrum semi-synthetic penicillin resistant to penicillinase:
a) Oxacillin
b) Amoxicillin
c) Bicillin-5
d) Naphcillin
003. Mark the drug with the longest duration of action:
a) Benzylpenicillin-sodium salt
b) Benzylpenicillin-novocaine salt
c) Bicillin-1
d) Bicillin-5
004. Cephalosporins are used in diseases caused by:
a) Gram-negative flora
b) Gram-positive flora
c) Gram-negative flora and gram-positive bacteria, in case of inefficiency or intolerance of penicillins
d) Only Pseudomonas aeruginosa and bacteroids
005. Imipenem is destroyed by the following enzyme, which limits its use in a number of infections:
a) Penicillinase
b) Cephalosporinase
c) Renal tubule Dehydropeptidase-I
d) Catechol-ortho-methyltransferase
006. Note an antibiotic from the group of penicillins resistant to the action of penicillinase
a) Benzipenicillin sodium salt
b)Bicillin
c)Oxacillin
d) Ampicillin

SECTION III ANTIBIOTICS, PART 3 (ALL EXCEPT BETA-LACTAM)

001. Specify the spectrum of action of tetracyclines:
a) The spectrum of action is similar to macrolides; have a bactericidal effect
b) Broad-spectrum drugs; have a bacteriostatic effect
c) Broad-spectrum drugs; have a bactericidal effect
d) The spectrum of action is similar to that of penicillin; they have a bacteriostatic effect
002. Specify an antibiotic from the group of aminoglycosides:
a) Erythromycin
b) Gentamicin
c) Vibramycin
d) Polymyxin
003. Note the side effects characteristic of aminoglycosides:
a) Anemia, thrombocytopenia
b) Liver damage
c) Hearing loss, vestibular disorders, nephrotoxicity
d) Visual impairment, bulbar disorders
004. What side effects are characteristic of polymyxin M sulfate:
a) Lowering of blood pressure
b) Nephrotoxicity
c) Hepatotoxicity
d) Inhibition of hematopoiesis
005. Specify the side effects characteristic of vancomycin:
a) Pseudomembranous colitis
b) Ototoxicity and nephrotoxicity
c) Inhibition of pyridoxal phosphate synthesis
d) All of the above

SECTION IV SULFONAMIDES

001. Which of the sulfonamides refers to drugs acting in the intestinal lumen:
a) Sulfalene
b) Phthalazole
c) Sulfadimesine
d) Sulfapyridazine
002. Sulfonamides for topical use include:
a) Biseptol
b) Sulfapyridazine
c) Sulfacyl-sodium
d) Sulfadimesine
003. Note long-acting sulfanilamide:
a) Sulfadimesine
b) Urosulfan
c) Sulfapyridazine
d) Norsulfazole
004. The mechanism of action of sulfonamides is associated with:
a) Inhibition of dihydrofolate reductase
b) Competitive antagonism with paraaminobenzoic acid and inhibition of dihydropteroate synthetase
c) Inhibition of cyclooxygenase

d) Competitive antagonism with paraaminobenzoic acid
005. The combination of sulfonamides with tremethoprim allows:
a) Reduce the number of side effects of sulfonamides
b) Increase antimicrobial activity with the achievement of a bactericidal effect
c) Increase the duration of action of drugs
d) Increase the rate of elimination of sulfonamides
006. Which of the sulfonamides is used in ophthalmological practice for the treatment of conjunctivitis:
a) Phthalazole
b) Sulfalene
c) Sulfacyl-sodium
d) Sulfadimesine
007. Specify the mechanism of action of trimethoprim:
a) Competitive relationship with paraaminobenzoic acid
b) Inhibition of dihydrofolate
reductase c) Inhibition of dihydropteroate synthetase
d) Inhibition of DNA gyrase
008. Specify the side effects characteristic of sulfonamides:
a) Hematological disorders
b) Crystalluria
c) Dyspeptic phenomena and disorders of the central nervous system
d) All of the above

SECTION V ANTI-TUBERCULOSIS DRUGS

001. Isolate a drug that acts only on mycobacteria:
a) Isoniazid
b) Streptomycin sulfate
c) Rifampicin
d) Kanamycin sulfate
002. Note the preparation related to isonicotinic acid hydrazides:
a) Rifamycin
b) Isoniazid
c) Ethambutol
d) Ethionamide
003. Isoniazid exhibits anti-vitamin activity in relation to:
a) Vitamin B1
b) Vitamin B6
c) Vitamin C
d) Vitamin D
004. Specify the mechanism of action of isoniazid:
a) Inhibition of protein synthesis
b) Violation of the synthesis of mycolic acids
c) Inhibition of RNA synthesis
d) Inhibition of ATP synthesis
005. Which of the indicated anti-tuberculosis drugs refers to antibiotics aminoglycosides:
a) Isoniazid
b) Streptomycin
c) Rifampicin
d) Ethambutol
006. Specify the mechanism of action of streptomycin:
a) Inhibition of cell wall synthesis
b) Violation of protein synthesis at the ribosome level
c) Inhibition of nucleic acid synthesis
d) Violation of the permeability of the cytoplasmic membrane
007. Indicate which side effect is characteristic of streptomycin:
a) Cardiotoxicity
b) Dyspeptic phenomena
c) Impaired perception of yellow and green colors
d) Defeat of the VIII pair of cranial nerves
008. Specify the mechanism of action of PASC:
a) Inhibition of the synthesis of mycolic acids
b) Competitive relationship with paraaminobenzoic acid
c) Inhibition of DNA-dependent RNA polymerase
d) Inhibition of DNA gyrase
009. Using which principle of tuberculosis therapy can slow down the development of mycobacterium resistance to chemotherapeutic drugs:
a) Monotherapy with an increased dose of the drug
b) Combined use of 2 or more drugs with different mechanisms of action
c) Prolongation of treatment
periods d) Combined use of 2 or more drugs with similar mechanisms of action

SECTION VI ANTIFUNGAL AGENTS

001. All of the following drugs are used to treat mycoses caused by pathogenic fungi, with the exception of:
a) Nystatin
b) Griseofulvin
c) Amphotericin B
d) Ketoconazole
002. Specify the remedy used for systemic (deep) mycoses:
a) Phthalazole
b) Griseofulvin
c) Amphotcrycin
B) Nitrofungin
003. In what kind of mycoses is an alcohol iodine solution used:
a) In systemic mycoses
b) With epiermomycosis
c) With candidamycosis
d) With all types of mycoses
004. Specify the mechanism of action of Amphotericin In:
a) Violation of cell wall synthesis
b) Violation of protein synthesis
c) Violation of mRNA synthesis
d) Violation of cell membrane permeability
005. Which of these means violates the permeability of the cell membrane of fungi of the Candida type
a) Amphotericin B
b) Ketoconazole
c) Nystatin
d) Terbinafine
006. Specify an antifungal drug, during the treatment of which it is advisable to periodically shave the hair on the affected areas, remove nails and peel off the upper layers of the epidermis:
a) Amphotericin B
b) Griseofulvin
c) Ketoconazole

d) Decamine

SECTION VII SYNTHETIC ANTIMICROBIALS OF DIFFERENT CHEMICAL STRUCTURES. ANTI-SYPHILITIC AGENTS

001. Note the derivative of 8-oxyquinoline:
a) Nitrxoline
b) Ethazole
c) Nalidix acid
d) Ciprloxacin

002. Nitrofuran derivatives include:
a) Furazolidone
b) Phthalal
c) Nitocline
d) Nystatin

003. Quinoxaline derivatives include:
a) Vincristine
b) Dioxidine
c) Nitroxoline
d) Furacillin

004. Quinolone derivatives include:
a) Furazolidone
b) Nalidixic acid
c) Nitroxoline
d) Dioxidine

005. Specify the indications for the use of nitrofurans of resorptive action:
a) Upper respiratory tract infections
b) Urinary tract and intestinal infections c) Generalized infections
d) Infectious joint lesions

006. Specify the mechanism of action of fluoroquinolones:
a) Inhibition of fofolipase C
b) Inhibition of DNA gyrase
c) Inhibition of bacterial wall synthesis
d) Increasing the permeability of the bacterial wall

007. Specify the preparation of bismuth for the treatment of syphilis:
a) Biseptol
b) Bismoverol
c) Nalidixic acid
d) Ciprofloxacin

008. To accelerate the resorption of gum in the late stages of syphilis, use:
a) bismuth preparations
b) Iodine preparations
c) Benzylpenicillins
d) Gold preparations

SECTION VIII ANTIPROTOZOAL AGENTS

001. Note the remedy used for the prevention and treatment of malaria:
a) Hingamin
b) Acrihine
c) Quiniophone
d) Sulfonamides

002. Note the remedy used to treat amoebiasis:
a) Metronidazole
b) Furazolidone
c) Sulfadimesine
d) Enteroseptol

003. Specify the remedy used to treat trichomonadosis:
a) Tinidazole
b) Acrihine
c) Quiniophone
d) Tetracycline

004. Note the remedy for the treatment of toxoplasmosis:
a) Chloridine
b) Akrikhin
c) Quiniophone
d) Tetracycline

005. For the treatment of giardiasis use:
a) Furazolidone
b) Quiniophone
c) Monomycin
d) Solusurmin

006. Specify a pyrimidine derivative with antimalarial properties:
a) Primakhin
b) Chloridine
c) Hingamine
d) Mefloquine

007. Which of these antimalarial drugs affects the germ cells of plasmodium:
a) Quinine
b) Primaquine
c) Hingamine
d) Sulfonamides

008. hematoschizotropic agents (affecting erythrocyte schizonts) include all drugs except:
a) Hingamin
b) Primaquine
c) Sulfonamides and sulfones
d) Doxycycline

009. Specify a histoschisotropic agent (affecting tissue forms of plasmodium):
a) Mefloquine
b) Hingamine
c) Chloridine
d) Doxycycline

010. For the purpose of public prevention of malaria, use:
a) Primaquine and chloridine
b) Sulfonamides and sulfones
c) Hingamine and quinine
d) Doxycycline

011. Which of these drugs is an amoebecide effective in any localization of the process:
a) Hingamin
b) Metronidazole
c) Emetine hydrochloride
d) Quiniophone

012. Specify a tissue amoebicide effective for localization of amoebas in the liver:
a) Hingamin
b) Emetine hydrochloride
c) Quiniophone
d) Doxycycline

013. Which of the presented drugs acts on amoebas in the liver and intestinal wall:
a) Solusurmin
b) Emetine hydrochloride
c) Hingamine
d) Monomycin

SECTION IX ANTHELMINTIC AGENTS

001. Drugs that disrupt the function of neuromuscular transmission in roundworms include:
a) Levamisole
b) Phenasal
c) Bithionol
d) Aminoacrichine

002. The agents acting mainly on the energy processes of helminths include:
a) Ditrazine
b) Bithionol
c) Aminoacrichine
d) Naphthamone

003. The means that paralyze the neuromuscular system mainly in flatworms include:
a) Levamisole
b) Piperazine
c) Phenasal
d) Pyrantel

004. Specify the mechanism of action of ethylene tetrachloride:
a) Destruction of the integumentary tissues of helminths
b) Inhibits metabolic processes in the cell (cellular poison)
c) Inhibition of helminth energy processes
d) Disruption of neuromuscular transmission function in helminths

005. Specify the mechanism of the anthelmintic action of piperazine:
a) Inhibition of helminth energy processes
b) Violation of the function of neuromuscular transmission in roundworms
c) Destruction of the integumentary tissues of helminths
d) Violation of the function of neuromuscular transmission in flatworms

006. Specify the mechanism of action of mebendazole:
a) Inhibition of helminth energy processes
b) Violation of the function of neuromuscular transmission in roundworms
c) Destruction of the integumentary tissues of helminths
d) Violation of the function of neuromuscular transmission in flatworms

007. All drugs have an anti-hematodose effect, except:
a) Naphthamone
b) Aminoacrichine
c) Levamisole
d) Mebendazole

008. An anthelmintic drug with immunostimulating properties is:
a) Piperazine
b) Levamisole
c) Naphthamone
d) Phenasal

009. Specify the anthelmintic drug, benzimidazole derivative:
a) Ditrazine
b) Mebendazole
c) Aminoacrichine
d) Naphthamone

010. Which of these drugs is used for ascariasis and enterobiosis:
a) Praziquantel
b) Piperazine adipinate
c) Aminoacrichine
d) Phenasal

SECTION X ANTIVIRAL AGENTS

001. Note the antiviral drug – a derivative of thiosemicarbazone:
a) Midantan
b) Vidarabine
c) Metisazone
d) Remantadine

002. Specify a drug that does not belong to nucleoside analogues:
a) Acyclovir
b) Zidovudine
c) Saquinavir
d) Idoxuridine

003. Note the drug that is a derivative of adamantane:
a) Foscarnet
b) Remantadine
c) Saquinavir
d) Vidarabine

004. Specify which of the listed drugs is a derivative of peptides:
a) Saquinavir
b) Acyclovir
c) Metisazone
d) Zidovudine

005. From the proposed drugs, choose an indole carboxylic acid derivative:
a) Midantan
b) Idoxuridine
c) Arbidol
d) Vidarabine

006. Specify the derivative of phosphonmuric acid:
a) Metisazone
b) Foscarnet
c) Interferon
d) Ganciclovir

007. Which drug is characterized by a depressing effect on the synthesis of nucleic acids:
a) Guanidine
b) Saquinavir
c) Midantan
d) Acyclovir

008. Specify the mechanism of antiviral action of gamma globulin:
a) Inhibition of nucleic acid synthesis
b) Inhibition of virus adsorption on the cell and its penetration into the cell
c) Inhibition of viral genome deproteinization
d) Inhibition of synthesis of "early" proteins

009. Specify the drug that inhibits the "assembly" of virions and the exit of the virus from the cell:
a) Remantadine
b) Metisazone
c) Saquinavir
d) Guanidine

010. Specify a drug that blocks reverse transcriptase of viruses:

a) Vidarabine
b) Metisazone
c) Remantadine
d) Zidovudine
011. Specify the most highly effective anti-herperic drug:
a) Remantadine
b) Zidovudine
c) Interferon
d) Acyclovir
012. Which of the listed synthetic drugs is used for the prevention of influenza A:
a) Interferon
b) Remantadine
c) Saquinavir
d) Metisazon
013. For the prevention of smallpox disease, use:
a) Arbidol
b) Acyclovir
c) Metisazone
d) Zidovudine
014. Nucleoside derivative for the treatment of HIV infection:
a) Acyclovir
b) Zidovudine
c) Guanidine
d) Ganciclovir
015. Specify the drug used in ophthalmological practice for herpetic lesions of the eye:
a) Saquinavir
b) Idoxuridine
c) Midantan
d) Guanidine
016. Choose from the proposed drugs an endogenous glycopeptide with antiviral properties:
a) Arbidol
b) Interferon
c) Midantan
d) Foscarnet
017. Specify which of their protvoviral drugs can cause and enhance autoimmune reactions:
a) Metisazone
b) Interferon
c) Acyclovir
d) Ribavirin
018. Which of the proposed drugs refers to recombinant alpha interferons:
a) Betaferon
b) Human leukocyte interferon
c) Intron A
d) Poludan