

NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES
OF UKRAINE

Department of internal diseases of animals



“CONFIRMED”

Dean faculty of veterinary medicine
prof. Mykola TSVILIKHOVSKY

“ 16 ” 05 2024

“APPROVED”

at the meeting of the department of therapy
and clinical diagnostics

Minutes № 9 of “ 15 ” 05 2024

Head of department

 prof. Nataliia GRUSHANSKA

”REVIEWED”

Guarantor of AP “Veterinary medicine”

Program Guarantor

 prof. Nataliia GRUSHANSKA

CURRICULUM OF ACADEMIC DISCIPLINE
«INTERNAL DISEASES OF ANIMALS»

Field of knowledge «Veterinary medicine»

Specialty 211 – «Veterinary medicine»

Academic programme Veterinary medicine

Faculty of Veterinary Medicine

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Kyiv – 2024

1. Description in the course
Internal diseases of animals
(назва)

Field of knowledge, specialty, educational degree		
Academic degree	<u>Master</u>	
Specialty	<u>21 – «Veterinary medicine»</u>	
Academic programme	<u>«Veterinary medicine»</u>	
Characteristics of the course		
Type	Compulsory	
Total number of hours	220	
Number of ECTS credits	7,3	
Number of modules	6	
Course project (work) (if any)	–	
Form of assessment	Credit, Credit, Examination	
Indicators of the discipline for full-time and part-time forms of university study		
	Full-time form of study	Part-time form of study
Course (year of education)	4–5	–
Semester	8, 9, 10	–
Lecture classes	45 hr.	–
Practical, seminar classes	–	–
Laboratory classes	120 hr.	–
Self-study	55 hr.	–
Individual assignments	–	–
Number of weekly classroom hours for the full-time form of study	5,1 hours	

1. Aim, objectives, competences and expected learning outcomes of the discipline

Aim: the main goal of the discipline "Internal Diseases of Animals" is for students to master important issues of general therapy and prevention of internal diseases of animals, as well as to study internal diseases of animals, to find out their etiology, pathogenesis, symptoms.

Objectives: during studying the discipline "Internal Diseases of Animals", students must acquire knowledge and practical skills regarding the etiology of pathogenesis, patho-anatomical changes, symptoms, diagnosis, course, prognosis, therapy and prevention of non-infectious internal diseases of animals. In the case of studying these issues, it is necessary to deepen the theoretical training on the etiopathogenesis of diseases and animal therapy, to develop in students clinical

thinking, a creative approach when solving practical issues on the elimination of animal diseases.

***Acquisition of competences:
integrated competency (IC):***

- IC 1 Ability to solve complex tasks and problems in the field of veterinary medicine, which involves conducting research and/or implementing innovations and is characterized by the uncertainty of conditions and requirements.

general competences (GC):

- GC 1. Ability to abstract thinking, analysis and synthesis.
- GC 2. Ability to apply knowledge in practical situations.
- GC 3. Knowledge and understanding of the subject field and profession.
- GC 7. Ability to conduct research at the appropriate level.
- GC 8. Ability to learn and master modern knowledge.
- GC 9. Ability to make informed decisions.
- GC 11. Ability to evaluate and ensure the quality of performed works.

special (professional) competences (SC):

- SC 1. The ability to establish the features of the structure and functioning of cells, tissues, organs, their systems and body apparatuses of animals of various classes and species - mammals, birds, insects (bees), fish and other vertebrates.
- SC 2. The ability to use tools, special devices, devices, laboratory equipment and other technical means to carry out the necessary manipulations during the performance of professional activities.
- SC 3. Ability to follow the rules of labor protection, asepsis and antiseptics during professional activities.
- SC 4. The ability to conduct clinical research for the purpose of formulating conclusions about the condition of animals or establishing a diagnosis.
- SC 6. Ability to select, pack, fix and send samples of biological material for laboratory research.
- SC 7. Ability to organize, conduct and analyze laboratory and special diagnostic studies.
- SC 8. Ability to use specialized software tools to perform professional tasks.

Expected Learning Outcomes (ELO):

1. Know and correctly use the terminology of veterinary medicine.
2. Use information from domestic and foreign sources to develop diagnostic, treatment and business strategies.
3. Collect anamnestic data during registration and examination of animals, make decisions regarding the choice of effective methods of diagnosis, treatment and prevention of animal diseases.

As a result of studying the academic discipline, the student must
know:

- terminology of veterinary medicine;
- methods of clinical, laboratory, functional, instrumental and other animal studies;
- features of etiology, pathogenesis, symptoms, as well as principles of animal treatment and prophylaxis of internal diseases.

be able:

- to use information from domestic and foreign sources to develop diagnostic, treatment and business strategies;
- to collect anamnestic data during registration and examination of animals, make decisions regarding the choice of effective methods of diagnosis, treatment and prevention of animal diseases;
- to have the methods of clinical and laboratory, functional, instrumental and other studies of sick animals and to be able to analyze their results;
- recognize (diagnose) internal diseases of animals;
- to apply medicines and biological agents appropriately to ensure the safety of the food chain and the environment;
- communicate effectively with colleagues to share scientific and technical information and practical experience;
- draw up a plan of measures for the prevention of internal diseases of animals and organize its implementation.

2. Programme and structure of the discipline for: – complete full-time (part-time) form of study

Topic of lecture 1. Introductory lecture. Definition of the subject. The main stages of the development of the doctrine of internal diseases of animals. Principles, types and methods of therapy.

Topic of lecture 2. General therapy and prevention of internal diseases of animals. Theoretical foundations and practical aspects of dispensation of animals.

Topic of lecture 3. Concept of physiotherapy and physiotherapy. Principles and classification of modern methods of physiotherapy.

Topic of lecture 4. Diseases of the cardiovascular system. Classification. Spread. General symptoms and syndromes. Diseases of the pericardium.

Topic of lecture 5. Diseases of the myocardium and endocardium.

Topic of lecture 6. Diseases of the respiratory system. Classification and distribution. Symptoms and syndromes of respiratory diseases. Diseases of the respiratory tract.

Topic of lecture 7. Inflammatory and non-inflammatory lung diseases.

Topic of lecture 8. Diseases of the pleura: pleurisy, hydro- and pneumothorax.

(5th year of education, 9 semester)

Topic of lecture 1. Diseases of the digestive system. Classification, distribution, symptoms and syndromes of diseases of the digestive system. Diseases of the stomachs of ruminants.

Topic of lecture 2. Stomach and intestinal diseases with colic syndrome. Classification, main symptoms, principles of diagnosis and treatment of sick animals with colic syndrome.

Topic of lecture 3. Diseases of the stomach and intestines: gastritis, peptic ulcer, gastroenteritis, gastroenterocolitis.

Topic of lecture 4. Diseases of the liver and biliary tract. Classification, distribution, main syndromes of diseases of the liver and biliary tract. Hepatitis, hepatodystrophy.

Topic of lecture 5. Diseases caused by metabolic disorders. Classification, distribution, features of the course and diagnosis. Ketosis.

Topic of lecture 6. Diseases caused by disturbances in the metabolism of macroelements. Osteodystrophy, hypomagnesemia, postpartum hypophosphatemia.

Topic of lecture 7. Microelementoses of animals. Distribution, general principles of diagnosis and prevention.

Topic of lecture 8. Diseases of the endocrine system. Causes and mechanisms of development. Diseases of the thyroid, parathyroid and adrenal glands.

(5th year of education, 10 semester)

Topic of lecture 1. Diseases of young animals. Classification and spread of diseases of young animals. Peculiarities of the age-related physiology of young animals. Immunodeficient condition of young animals. Antenatal hypotrophy.

Topic of lecture 2. Classification, distribution and main syndromes of kidney and urinary tract diseases. Principles of therapy and prevention.

Topic of lecture 3. Urolithiasis. Distribution, general principles of diagnosis and therapy.

Topic of lecture 4. Diseases of the blood system. Classification. Spreading. Anemias: classification, etiology, methods of diagnosis and treatment.

Topic of lecture 5. Diseases of the nervous system. Classification, distribution, general syndromes and diagnosis of diseases of the nervous system.

Topic of lecture 6. Functional diseases of the nervous system in animals. Distribution, general principles of diagnosis and therapy.

Topic of lecture 7. Allergic and autoimmune diseases of animal skin. General characteristics, methods of diagnosis and treatment.

Topic of lecture 8. Diseases of fur animals. Biological features of fur animals. Distribution, diagnosis and prevention of internal diseases of fur animals.

Structure of education discipline (4 year of education 8 semester)

Names of content modules and topics	Number of hours						
	Full-time form						
	weeks	total	Also include				
			1	p	lab	ind	self
1	2	2	3	4	5	6	7
Content module 1. General Therapy.							
Topic 1. Definition of the subject. The main stages of the development of the doctrine of internal diseases of animals. Principles, types and methods of therapy.	1-2	8	2		4		2
Topic 2. General therapy and prevention of internal diseases of animals. Theoretical foundations and practical aspects of dispensation of animals. Therapeutic technique.	3-4	8	2		4		2
Topic 3. Concept of physiotherapy and physiotherapy. Principles and classification of modern methods of physiotherapy.	5-6	8	2		4		2
Together according to the content module 1		24	6		12		6
Content module 2. Diseases of cardiovascular and pulmonary system.							
Topic 4. Diseases of the cardiovascular system. Classification. Spread. General symptoms and syndromes. Diseases of the pericardium.	7-8	9	2		4		3
Topic 5. Diseases of the myocardium and endocardium.	9-10	9	2		4		3
Topic 6. Diseases of the respiratory system. Classification and distribution. Symptoms and syndromes of respiratory diseases. Diseases of the respiratory tract.	11-12	9	2		4		3
Topic 7. Inflammatory and non-inflammatory lung diseases.	13-14	9	2		4		3
Topic 8. Diseases of the pleura: pleurisy, hydro- and pneumothorax.	15	5	1		2		2
Together according to the content module 2		41	9		18		14
Total hours		65	15		30		20

Structure of education discipline (5 year of education 9–10 semester)

Names of content modules and topics	Number of hours						
	Full-time form						
	week	total	Also include				
			1	p	lab	ind	self
1	2	3	4	5	6	7	8
5 year of education 9 semester							

Content module 1. Diseases of digestive system							
Topic 1. Diseases of the digestive system. Classification, distribution, symptoms and syndromes of diseases of the digestive system.	1-2	12	2		6		4
Topic 2. Stomach and intestinal diseases with colic syndrome. Classification, main symptoms, principles of diagnosis and treatment of sick animals with colic syndrome.	3-4	8	2		6		
Topic 3. Diseases of the stomach and intestines: gastritis, peptic ulcer, gastroenteritis, gastroenterocolitis.	5-6	12	2		6		4
Topic 4. Diseases of the liver and pancreas.	7-8	8	2		6		
Together according to the content module 1		40	8		24		8
Content module 2. Diseases caused by methabolic diseases							
Topic 5. Diseases caused by metabolic disorders. Classification, distribution, features of the course and diagnosis. Ketosis.	9-10	12	2		6		4
Topic 6. Diseases caused by disturbances in the metabolism of macroelements.	11-12	8	2		6		
Topic 7. Microelementoses of animals. Distribution, general principles of diagnosis and prevention.	13-14	11	2		6		3
Topic 8. Diseases of the endocrine system. Causes and mechanisms of development.	15	4	1		3		
Together according to the content module 2		35	7		21		7
Total hours		75	15		45		15
5 year of education 10 semester							
Content module 1. Diseases of young animals, urinary and blood system							
Topic 1. Diseases of young animals. Classification and spread of diseases of young animals.	1-2	12	2		6		4
Topic 2. Kidney diseases. Principles of therapy and prevention.	3-4	8	2		6		
Topic 3. Disease of urinary tract. Urolithiasis. Distribution, general principles of diagnosis and therapy.	5-6	12	2		6		4
Topic 4. Diseases of the blood system. Spreading and principles of diagnostics and treatment.	7-8	8	2		6		
Together according to the content module 1		40	8		24		8
Content module 2. Diseases of nervous system, skin and fury animals.							
Topic 5. Diseases of the nervous system. Spreading and principles of diagnostics and treatment.	9-10	12	2		6		4
Topic 6. Functional diseases of the nervous system in animals. Distribution, general principles of diagnosis and therapy.	11-12	8	2		6		
Topic 7. Allergic and autoimmune diseases of animal skin. General characteristics, methods of diagnosis and treatment.	13-14	12	2		6		4
Topic 8. Diseases of fur animals.	15	8	1		3		4
Together according to the content module 2		40	7		21		12
Total hours		80	15		45		20

3. Laboratory class topics

No order	Name of topics	Hours
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4 year of education, 8 semester		
1.	№ 1. Personal hygiene, safety techniques during research and treatment of animals. Clinical documentation.	2
2.	№ 2. Therapeutic technique. Individual and group methods of drug administration. External methods of drug use.	2
3.	№ 3. Enteral methods of drug administration. Enemas	2
4.	№ 4. Parenteral administration of drugs. Introduction of medicinal substances into respiratory organs: inhalation, aerosol therapy and aerosol prophylaxis.	2
5.	№ 5. Etiotropic and pathogenetic therapy. Novocaine blocks, anti-stress therapy, reflexology. Non-specific stimulation therapy.	2
6.	№ 6. Physiotherapy. Mechanism of action, indications, method of application of photo-, electro-, hydro- and mechanotherapy.	2
7.	№ 7. Clinical-laboratory and special research methods of thematically sick animals in a clinic with pathology of the cardiovascular system.	2
8.	№ 8. Diagnosis, treatment and prevention of myocardial diseases.	2
9.	№ 9. Diagnosis, treatment and prevention of pericardial diseases.	2
10.	№ 10. Diagnosis, treatment and prevention of endocardial diseases and heart defects.	2
11.	№ 11. Clinical-laboratory and special research methods of thematically sick animals in a clinic with pathology of the respiratory organs.	2
12.	№ 12. Diagnosis, treatment and prevention of diseases of the respiratory tract.	2
13.	№ 13. Diagnosis, treatment and prevention of pneumonia in animals.	2
14.	№ 14. Diagnosis, treatment and prevention of non-inflammatory lung diseases: emphysema, pulmonary edema, pulmonary hemorrhage.	2
15.	№ 15. Differential diagnosis, treatment and prevention of pleural diseases: pleurisy, hydro- and pneumothorax.	2
5 year of education, 9 semester		
16.	№ 1. Clinical laboratory and special methods of research, treatment and prevention of diseases of the digestive system.	4
17.	№ 2. Diagnosis, treatment and prevention of diseases of the oral cavity, pharynx and esophagus.	2
18.	№ 3. Diagnosis, treatment and prevention of ruminant foregut diseases.	4
19.	№ 4. Diagnosis, treatment and prevention of diseases of the	2

	stomach and intestines with colic syndrome. Enteralgia, expansion of the stomach, intestinal flatulence. Chemo- and coprosthesis.	
20.	№ 5. Diagnosis, treatment and prevention of diseases of the stomach and intestines: gastritis, gastroenteritis, peptic ulcer disease.	4
21.	№ 6. Diagnosis, treatment and prevention of diseases of the peritoneum (peritonitis, ascites).	2
22.	№ 7. Clinical laboratory and special methods of research, treatment and prevention of diseases of the liver and biliary tract.	4
23.	№ 8. Clinical laboratory and special methods of research and treatment for diseases of the pancreas.	2
24.	№ 9. Clinical laboratory and special methods of research of metabolic diseases in a clinic with thematically sick animals.	4
25.	№ 10. Diagnosis, treatment and prevention of diseases caused by a predominant disorder of protein, carbohydrate and lipid metabolism.	2
26.	№ 11. Clinical-laboratory and special research methods for disturbances in the metabolism of macroelements in animals.	4
27.	№ 12. Differential diagnosis, therapy and prevention of macronutrient metabolism disorders in animals	2
28.	№ 13. Diagnosis, treatment and prevention of animal microelement diseases.	4
29.	№ 14. Diagnosis, treatment and prevention of diseases caused by vitamin metabolism disorders.	2
30.	№ 15. Clinical laboratory and special methods of research, treatment and prevention of diseases of the endocrine system.	3
5 year of education, 10 semester		
31.	№ 1. Diagnosis, treatment and prevention of neonatal diseases of young animals: hypoglycemia, casein-bezoar disease, colostrum toxicosis, dyspepsia of newborns.	4
32.	№ 2. Diagnosis, treatment and prevention of postnatal diseases of young animals: hypoplastic anemia, parakeratosis of piglets, periodic tympany of calves, bezoar disease, white muscle disease, enzootic ataxia of lambs.	2
33.	№ 3. Clinical-laboratory and special research methods of thematically sick animals in the clinic with diseases of the urinary system.	4
34.	№ 4. Clinical laboratory and special methods of research, treatment and prevention of kidney diseases.	2
35.	№ 5. Clinical laboratory and special methods of research, treatment and prevention of diseases of the urinary tract.	4
36.	№ 6. Differential diagnosis, treatment and prevention of	2

	urolithiasis (urolithiasis).	
37.	№ 7. Clinical and hematological diagnosis, therapy and prevention of anemias: posthemorrhagic, hypoplastic, hemolytic.	4
38.	№ 8. Diagnosis, therapy and prevention of diseases with hemostasis disorders. Hemorrhagic diatheses.	2
39.	№ 9. Clinical-laboratory and special research methods of thematically sick animals with diseases of the nervous system.	4
40.	№ 10. Diagnosis, therapy and prevention of diseases of the brain and spinal cord and their membranes.	2
41.	№ 11. Functional nervous diseases. Epilepsy, eclampsia and neuroses.	4
42.	№ 12. Stress syndrome in animals and its prevention.	2
43.	№ 13. Diagnostic methods and general principles of animal treatment for allergic diseases.	4
44.	№ 14. Diagnosis, treatment and prevention of skin diseases and their derivatives. Sweat gland dysfunction. Autoimmune skin diseases.	2
45.	№ 15. Clinical laboratory and special methods of research, treatment and prevention of non-contagious diseases of fur animals	3

4. Topics for self-study

№	Topic title	Hours
1	Common prophylaxis of internal diseases of animals. Analysis of keeping animals	4
2	Metal indication of reticulum and entering of magnetic rings	2
3	Vascular diseases: arteriosclerosis and thrombosis. Assignment	6
4	Diagnostics, therapy and prophylaxis of bronchial asthma in animals	8
5	Analysis of clinical-laboratory and special methods of measurement animals with diseases of digestive system	4
6	Mechanical and dynamic intestinal obstruction. Thromboembolism of mesenteric arteries.	4
7	Analysis of clinical-laboratory and special methods of research on animals caused by a predominant disorder of protein, carbohydrate and lipid metabolism.	4
8	Analysis of clinical-laboratory and special methods of animal research for macronutrient metabolism disorders.	3
9	Analysis of clinical-laboratory and special methods of research on animals caused by kidney and urinary system disorders.	4

10	Analisis of clinical-laboratory and special methods of mesearument animals with diseases of blood system.	4
11	Analisis of clinical-laboratory and special methods of mesearument animals with diseases of nervous system.	4
12	Analisis of clinical-laboratory and special methods of mesearument animals with allergic diseases.	4
13	Metabolic diseases of fur animals.	4

5. Teaching methods.

- verbal method (lecture, explanation, discussion, instruction, conversation);
- practical method (laboratory, practical classes, statistical processing);
- visual method (explanation, discussion, instruction, conversation);
- work with educational and methodical literature (summarizing, summarizing, annotating, reviewing, writing an essay);
- video method (distance, multimedia, web-oriented classes);
- independent work (task performance).

6. Forms of assessment

- exam;
- oral or written survey;
- modular testing;
- team projects;
- abstracts, essays;
- protection of practical works;
- presentations and speeches at scientific events.

«Approve»

Head of department _____

« ____ » _____ 2023

Variant № 1

1. In the veal-hypotrophy there is a weight loss, cyanosis of the mucous membranes, a decrease in skin elasticity, wool is squat. Body temperature is 38.9 ° C. Breathing is accelerated, tense, superficial. Cough long. The wheezing is wet. In the lower area of the chest, respiratory noises are not listened to. In percussion of the chest, limited areas of blunts were detected on the left. Make a diagnosis

1.	Acute bronchitis
2.	Crupose pneumonia
3.	Chronic bronchopneumonia
4.	Emphisema of lungs

2. Name what infectious disease should be taken into account in the differential diagnosis of primary pharyngitis in pigs

1.	Salmonellosis
2.	Anthrax
3.	Erysepeloid
4.	Pastereliosis

3. Name the disease of the pancakes of ruminants, which can be complicated

1.	Tympania rumen
2.	Acidosis rumen
3.	Alkalosis rumen
4.	Closing of omasum
5.	Traumatic reticulitis

4. The most pronounced biological action of ultraviolet rays:

1.	Long waves
2.	Medium waves
3.	Short waves
4.	mixed

5. Name the disease in horses with a symptom complex of colic at which the sex of the animal is required to consider

1.	Catarrhal enteralgia
2.	Pinching of the inguinal and mock hernia
3.	Tromboembolism of mesenteric arteries
4.	Twist of the gut

6. With intra-abdominal introduction of piglets-sidunes fix the pelvic extremities upside down. The injection place is

1.	In the area of the hungry fossa on the left side
2.	between the penultimate pair of nipples at a distance of 3.0 cm from the white line on the right or left side
3.	In the area of the hungry fossa on the right side
4.	between the last pair of nipples at a distance of 1-1.5 cm from the white line on the right or left side

7. List novocaine blockades shown in bronchopneumonia of animals

1.	Lumbar (paraneprhal)
2.	Stellar sympathetic node
3.	Thoracic visceral nerves and border trunk
4.	Sacral
5.	Paralumbinal

18. What diseases correspond to the given treatment

1. Ulcerus disease	A. Acetic acid, sugar, sour milk
2. Ascitis	B. Furosemide, Calcium Chloride, Digtoxin

8. Name the heart disease characterized by the growth of connective (fibrous) tissue in the myocardium and its compaction.

(In the answer sheet fit the right answer in one word)

9. The symptom complex of a number of diseases of systems and organs that are accompanied by the accumulation of transudate in the pleural cavity is called

(In the answer sheet fit the right answer in one word)

10 List the drugs used to weaken cough in small animals

1.	Codein sulfatis
2.	Silver nitrate
3.	Ascorbinic acid
4.	Libexin
5.	Tetracyclinum

11. List medicines shown in ulcer disease

1.	Binders
2.	Diuretic
3.	Hemostatic
4.	Painkillers
5.	Non -steroidal anti -inflammatory

12. Name the remedies for correction of the pH of scar in alkalosis

1.	Acide milk
2.	Sodium hydrocarbonatis
3.	Sugar
4.	Acetic acid
5.	Alkaline mixes

13. Place in accordance with heart disease symptoms

A. Myocarditis	1. Body temperature is normal 2. Tachycardia is sharply expressed 3. Weakening of the heartbeat
B. Myocardosis	4. Edema develops rapidly, increasing every day of illness 5. Pain in the area of the heart 6. Swelling develops slowly and often have a variable character 7. Often knocking a heartbeat

14. What is called parenteral administration for therapeutic purposes of various protein substances.

(In the answer sheet fit the right answer in one word)

15. Inflammation of the mucous membrane and the submucosal layer of the nose is called.

(In the answer sheet fit the right answer in one word)

16. What is the complex stomach in newborn calves begins to function from the first day of life?

1	Rumen
2	Omasum
3	Reticulum
4	Abomasum

17. List the symptoms characteristic of larynx swelling in animals

1.	Visible mucous membranes hyperemic
2.	Difficulty breathing that is often accompanied by whistle, wheezing, moaning
3.	Expiratory shortness of breath
4.	Serous purulent leakage from nostrils
5.	Inspiratory shortness of breath

28. Place in accordance with the symptoms predominantly right or left ventricular heart failure

3. AAlkalosis rumen	C.Bismuth preparations, mucous decoctions, Belladonna preparations, Vikasol, vit u
4.Katarhal enteralgia	D.Atropine sulfate, tincture of valerian, warm shallow enemas

19. Due to localization endocarditis is:

1	Valvular
2	Vascular
3	Wall
4	Perforative
5	Warty

20. Lisatomedicines are

1	Pancreatine
2	ASD
3	HydrolysineL-130
4	Sirepar
5	Kampolon

21. Which of these drugs are shown in acute myocarditis

1	Antibiotics
2	Cardiac glycosides
3	Corticosteroids
4	Cold on heart area
5	Infared irradiation

22. What diseases of the pleura correspond to these symptoms?

1.Pleuritis	A.Body temperature is increased by 1-1.5 ° C. At auscultation, friction noises are heard, which are exacerbated by pressure on the chest with a phonendoscope. The cough is weak, painful..
2. Hydrothorax	B. Asymmetry of the chest wall. On the damaged side, percussion reveals a fairly strong box sound.
3. Pneumothorax	C.Dumped or blunt sound in the chest area, the area of which is limited by a horizontal upper line. Body temperature is normal or reduced..

23. What is called the introduction into the body through intact skin or mucous membrane of medicinal substances in the form of ions by means of galvanic current

(In the answer sheet fit the right answer in one word)

24. What is called myocardial inflammation, characterized by exudative-proliferative processes of interstitial tissue and alternative changes in muscle fibers

(In the answer sheet fit the right answer in one word)

25. List the upper respiratory tract diseases

1.	Pneumonia
2.	Tracheitis
3.	Pleuritis
4.	Laringitis
5.	Meningitis

26. Heamotherapia consists of:

1	Hemotransfusion;
2	Lactotherapy;
3	Isohemotherapy;
4	Heterohemotherapy

27. The replacement therapy is directed:

1	to replenish the lack of vital substances in the body
2	on the mechanism of disease development
3	to eliminate the cause of illness
4	to normalize the functions of the nervous system

A.Right-ventriculum failure	1. Pulmonary edema 2. Stagnation of blood in the liver 3. Hydrothorax and ascites
B.Left-ventriculum failure	4. Shortness of breath 5. Cough 6. Swelling of subcutaneous tissue distal extremities

29. Place in accordance with when shown and contraindicated IR irradiation

A. is shown	1. Malignant tumors
B. is contraindicated	2. myositis, arthritis 3. Hemorrhagic diathesis 4. Treatment of wet eczema 5. Cachexia 6. Bronchopneumonia

30. To place for which pericarditis is characterized by symptoms:

A. Fibrinous pericarditis	1. Overflow and tension jugular veins 2. The soreness of the cardiac area 3. Weakening and diffusion of cardiac impulse.
B.Exudated pericarditis	4. Pericardial noise friction. 5. Pericardial noises of splash

NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE

ED«Master» Specilty211 – «Veterinary medicine»	Department Therapy and clinical diagnostics 2021-2022 educ. year	Examticket № 1 For dyscipline «Internal diseases of animals»	Approved headof department GrushanskaN.G. «_»_ 2023
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Examination question

1. Animal epilepsy. Etiopathogenesis, symptoms and treatment.

2. Basic criteria for diagnostics and prevention of anemia in animals.

Тестові завдання різних мунів

1. Which of these pathologies of young animals belong to neonatal?		7. Which of the following drugs will you apply first and foremost with acute posthemorrhagic anemia?	
1	The absence of anus	<input type="checkbox"/>	1 Suiferovit
2	Bleeding from the umbilical cord	<input type="checkbox"/>	2 Aminocapronic acid
3	umbilical sepsis	<input type="checkbox"/>	3 Ceancobalamin
4	omphalitis	<input type="checkbox"/>	4 Vitohepat
5	Junior toxicosis	<input type="checkbox"/>	5 Acetylsalicylic acid
2. Appearance of different erythrocytes in blood called ... In the answer sheet fit the right answer in one word		8. Which of the following anemias is caused by a lack of cyanocobalamin feed?	
3. Specify when renal hematuria occurs		<input type="checkbox"/>	1 Hemolytic
1	acute glomerulonephritis	<input type="checkbox"/>	2 Posthemorrhagic
2	urocystitis	<input type="checkbox"/>	3 Toxic
3	a malignant tumor and kidney injuries	<input type="checkbox"/>	4 Hypoplastic
4	chronic caturism	<input type="checkbox"/>	5 Autoimmune
5	malignant bladder tumors	9. What are the main causes of eclampsia	
4. List main symptoms of nephritis		<input type="checkbox"/>	1 Hypercalcemia
1	Edema	<input type="checkbox"/>	2 Uremia
2	Arterial hypertension	<input type="checkbox"/>	3 Toxicosis
3	Hypoproteinemia	<input type="checkbox"/>	4 Hyperparathyroidism
4	Fever	<input type="checkbox"/>	5 Hypoparathyroidism
5	Low urine density	10. In the case of severe paralysis to improve neuromuscular transmission and skeletal muscle work shown	
5. Name the drugs used for the purpose of Inhibition of infections in the urinary tract::		<input type="checkbox"/>	1 Quadrisol
1.	Essenciale	<input type="checkbox"/>	2 Strychnin
2.	Carsil	<input type="checkbox"/>	3 Dexamethasone
3.	Ceftriaxone	<input type="checkbox"/>	4 Aminazine
4.	No-spa	<input type="checkbox"/>	5 Proserin
5.	Biseptol		
6.	Bytryl		
6. Place in accordance with the symptoms of kidney disease			
A. Nephrosis	1. Significant proteinuria (up to 5%)		
B. Nephritis	2. Arterial hypertension		
C. Nephrosclerosis	3. Low urine density		
	4. Normal body temperature		
	5. Hematuria		

List of tests to determine the level of learning students

1. Name in one word the method of external treatment of animals overheated with water steam, sometimes with the addition of creolin, skewivide, ichthiol, tar, etc. to it:

(In the answer sheet fit the right answer in one word)

2. Name in one word the treatment procedure for cooling the body area in the initial stage of inflammation using a cotton-gauze pillow soaked in cold water or medicines:

(In the answer sheet fit the right answer in one word/слом)

3. Name in one word the treatment procedure for warming the area of the animal's body with a temperature of 40-500 with the use of bran, rye flour, sawdust, rootbulbblows, etc.:

(In the answer sheet fit the right answer in one word)

4. Name in one word the procedure in which the animal inhales through the tarnish sleeve of water steam from the boiling water poured on the head:

(In the answer sheet fit the right answer in one word)

5. Name in one word a form of hydrotherapy, which is based on the injected water into the rectum and other parts of the intestine, in order to assist in diseases of the digestive canal:

(In the answer sheet fit the right answer in one word)

6. What research methods relate to endoscopic:

1	Bronchoscopy
2	Toracocentesis
3	Laparoscopy
4	Cystoscopy
5	Laparocentesis

7. Pleurocentesis is

1	Puncture of heart bag
2	bladder puncture
3	Pleust puncture
4	Puncture of the abdominal cavity
5	Puncture of the caecum

8. Subcutaneous injections can be performed:

1	Near the joints
2	Near the tendon vagina
3	in places where the most developed subcutaneous tissue and little nerves and vessels
4	near cartilage
5	In places of fit of the harness

9. Probes are used to remove metal objects from the tracks:

1	Melixetian
2	Teliatnikov
3	Khokhlov
4	Cherkasov
5	Korobov

10. To wash the scar in cattle use probe:

1	Khokhlov
2	Teliatnikov
3	Cherkasov
4	Melixetian
5	Korobov

11. Probets are used to remove foreign objects from the esophagus in cattle: :

1	Melixetian
2	Khokhlov
3	Teliatnikov
4	Cherkasky

5	Korobov
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12. External methods of drug administration include::

1	Lotions
2	Poultices
3	Ruminocentesis
4	Applications
5	Mecroenemas

13. Resident medical history is established on:

1	Ambulatory sick animal
2	Seriously ill animals
3	Hospitalized animals
4	Breeding animals
5	Exoyic animals

14. What drugs are used for vaporization:

1	Antibiotics
2	Turpentine
3	Sulfonamides
4	Turpentine oil
5	Tar

15. Arrange according to the name

A. For thorough washing of the stomach and intestines in dogsк	1. Cleansing enemas
Б. To stimulate intestinal peristalsis and lower body temperature	2. Thermoregulating enemas
В. With a temporary or long-term delay in the excretion of fecal masses	3. Hypertonic enemas
Г. To free the rectum from fecal masses before all types of enemas	4. Emptying enemas
Д. With swelling, dropsy and atonic constipation	5. Subaqueous enema

16. The complex of special mechanical effects by hands on the skin and deep-lying tissues with therapeutic and prophylactic purposes is called in one word:

(In the answer sheet fit the right answer in one word)

17. What word is missing in the sentence?

... is the injection of the animal's own blood under the skin or intramuscularly	<i>In the answer sheet fit the right answer in one word</i>
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18. What word is missing in the sentence

... is the injection of blood from other animals of the same species into an animal under the skin or intramuscularly	<i>In the answer sheet fit the right answer in one word</i>
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19. What word is missing in the sentence

... is the injection of blood from animals of another species into an animal under the skin or intramuscularly	<i>In the answer sheet fit the right answer in one word</i>
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20. What phase of protein therapy do the following symptoms correspond to

1. The first phase (negative)	A. The general condition of the animal improves, the resolution of the inflammatory process accelerates, gas exchange increases, the hemoglobin content, the number of erythrocytes and leukocytes.
2. The second phase (positive)	Б. Deterioration of the general state of the animal's body, increase in body temperature, depression, acceleration of heart rate and respiratory movements, decrease in the total number of leukocytes and erythrocytes.

21. Arrange the following pathological conditions in accordance with the recommendations for the use of massage

A. Testimony	1. Muscle atrophy
B. Contraindications	2. Purulent processes
	3. Atony of the stomach and intestines

	4. Skin diseases 5. Peritonitis 6. Tympanium of the scar 7. Intussusception
--	--

22. Which dietary feed should we prescribe for which species of animals

1) dogs	a) leguminous hay, wheat bran, hay
2) pigs	б) fresh greens, sour milk, boiled eggs
3) ruminants	в) silage paste, milk, cheese
4) poultry	г) meat broth, milk, row liver

23. Arrange the following types of lamps according to the radiation sources

A. Sources of UV rays B. Sources of IR rays	1. bactericidal Uviol lamps 2. erythematous-uvial lamps 3. infrared lamps 4. Solux lamps 5. mercury-quartz lamps 6. light baths 7. Minin's lamp
--	---

24. What drugs are included in the diet for diseases of the hematopoietic system

1	Cyancobalamin
2	Vikasol
3	Retinol
4	Ergocalciferol

25. The method of electrotherapy includes:

1	Ultrasound therapy
2	Darsonvalisation
3	Galvanotherapy
4	Faradization

26. The following drugs are used for novocaine blockades:

1	hydrochloride salt of novocaine
2	magnesium sulfate
3	potassium chloride
4	potassium chloride

27. With what salts of microelements feed is enriched with diseases of the hematopoietic system? Give the most complete answer.

1	Phosphorus, iron, fluorine
2	Zinc, sodium, copper
3	Cobalt, copper, iron
4	Sodium, magnesium, iron

28. For diseases of which system, carnivores use drugs: campolon, sirepar, and liver is included in the diet

1	Hemapoetic
2	Cardiovascular
3	Respiratory
4	Urogenital

29. What temperature of novocaine solution is recommended for parenteral administration to animals:

1	37-39 °C
2	35-42 °C
3	40-43 °C
4	43-50 °C

30. In hemomotherapy, blood is stabilized:

1	5% sodium citrate solution
2	5% sodium carbonate solution
3	5% розчином натрію хлориду

4	5% sodium chloride solution
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31. In acute myocarditis, the use of cardiac glycosides:

1	Is used
2	Desired along with corticosteroids
3	Is contraindicated
4	Used along with antibiotics and sedatives

32. What word is missed in a sentence?

According to GV Domrachev distinguish... periods (stages) of myocarditis development.	<i>(In the answer sheet fit the right answer in one word)</i>
---	---

33. Myocardial disease, which is characterized by dystrophic processes in it, which in the future lead to a violation of the basic functions of the heart is-

<i>(In the answer sheet fit the right answer in one word)</i>

34. What diseases are the signs given?

1. Myocardosis	A. Inflammation of the endocardium, which is complicated by destructive and necrotic changes
2. Myocarditis	B. Disease characterized by the growth of connective tissue in the myocardium and its compaction
3. Myocardiosclerosis	C. Inflammation of the heart muscle
4. Endocarditis	D. Myocardial disease, which is characterized by dystrophic processes in it, which in the future lead to impaired heart function

35. The enlargement of the heart is characterized by:

1.	Increasing the heart volume due to the accumulation of fluid in the pericardial cavity
2.	The development of diffuse or local tumors (tumors) in the heart wall
3.	Increasing the heart cavities with a simultaneous change in the thickness of their walls and the shape of the heart
4.	Increasing the heart volume due to coronary artery thrombosis

36. The causes of cough in cattle are...

1.	Congestive phenomena in the brain
2.	stagnation of venous blood in the lungs
3.	переповненні рубця, коли останній тисне на діафрагму
4.	Swelling in the area

37. What word is missed in a sentence?

The non-span of the battal duct is postnatal... incompatible with life.	<i>(In the answer sheet fit the right answer in one word)</i>
---	---

38. number of simple heart defects...

1	16
2	8
3	36
4	24

39. What word is missed in a sentence?

Hydropericard is characterized by accumulation in tissues and a heart shirt ...	<i>(In the answer sheet fit the right answer in one word)</i>
---	---

40. What word is missed in a sentence?

За класифікацією професора Г.В.Домрачева виділяють ... групи хвороб серцево-судинної системи	<i>(In the answer sheet fit the right answer in one word)</i>
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41. Endocarditis should first of all be differentiated from ...

1.	myocarditis
2.	catarrhal pneumonia

3.	exudative pleuritis
4.	Hydropericardium

42. What diseases correspond to the listed symptoms:

1. Myocardosis	A. Pronounced depression, appetite is reduced or absent, temperature is high. The pulse is large, medium filling. Increasing the first heart tone. At auscultation endocardial noises. Symptoms of general heart failure develop rapidly.
2. Hydropericard	B. Severe inhibition, often atony of the pancreas, body temperature within physiological fluctuations. The heartbeat is increased. The pulse is low filling. The area of absolute cardiac dullness is increased. Heart tones are deaf, the second is weakened. Often the rhythm of gallop, embryocardia.
3. Heart dilatation	C. Body temperature is more often normal. Weakening of cardiac impulse, enhancement, splitting or split of the first and weakening of the second heart tone, impaired conduction function (more often in the form of atrioventricular blockade), cardiac (stagnant) edema develop slowly and often variable.
4. Acute endocarditis	D. Body temperature is more often normal. Overflow of jugular veins, swelling of the span, weak and diffuse heart impetus, increase in the area of heart blunting, tachycardia, weakening and muting of the heart tones, sometimes peculiar noises of fun.

43. What changes in the heartbeat correspond to the diseases given?

1. Increase	A. Acute myocarditis
2. Decrease	B. Acute endocarditis
	B. Hydropericardium
	Г. Heartenlargement

44. What diseases are the signs given?

1. Hydropericardium	A. inflammation of the endocardium that is complicated by destructive and necrotic changes
2. Cardiac enlargement	B. A disease characterized by the growth of connective tissue in the myocardium and compaction
3. Myocardiosclerosis	B. Increase of heart cavities with a simultaneous change in the thickness of their walls and shape of the heart.
4. Endocarditis	Г. hydropericardium

45. In which disease of the cardiovascular system prescribe appropriate treatment:

1. Myocardiodystrophia (myocardosis)	A. Treatment is not effective
2. Traumatic pericarditis	B. Glucose, diuretic, caffeine, cardiac glycosides
3. Miocardiosclerosis	B. Antibiotics or sulfanilamides

46. Inflammation of the mucous membrane and submucosal layer of the nose is called

(In the answer sheet fit the right answer in one word)

47. Pulmonary inflammation is called

(In the answer sheet fit the right answer in one word)

48. Inflammation of the mucous membrane and submucosal tissue of the bronchi is called

(In the answer sheet fit the right answer in one word)

49. Which of these symptoms refers to the common symptoms of respiratory diseases?

1.	Increasing body temperature.
2.	Cough.
3.	Loss of appetite.
4.	Tachycardia.

50. Inflammation of the mucous membrane, and later - submucosal and cartilage tissue of the larynx is called

(In the answer sheet fit the right answer in one word)

51. Specify the location of the bleeding when leak from the nostrils of the blood bright red with air blisters

1.	Gastric bleeding
2.	Pulmonary bleeding

3.	The bleeding from the frontal sinus
4.	Nosebleeding

52. During training, the horse develops exhaled shortness of breath, rapid fatigue. Abdominal type of breathing, which is accompanied by an "inflammatory chute". Body temperature - 38.1 ° C. Cough short, weak. Make a diagnosis

1.	Acute alveolar lung emphysema
2.	Bronchopneumonia
3.	Interstitial pulmonary emphysema
4.	Chronic bronchitis

53. At clinical examination of the horse established: inhibition, stretching of the neck, tenderness in the area of the larynx on palpation, inspiratory shortness of breath, cough. Body temperature is 39.1 °C. Your diagnosis:

1.	Catarrhal laringitis.
2.	Pharyngitis.
3.	Rhinitis
4.	Tracheitis.

54. List the upper respiratory tract diseases

1.	Pneumonia
2.	Tracheitis
3.	Pleuritis
4.	Laringitis
5.	Meningitis

55. List diseases that are attributed to inflammatory lung pathology

1.	Pulmonary emphysema
2.	Croupous pneumonia
3.	Lungs swelling
4.	Catarrhal bronchopneumonia
5.	Pulmonary bleeding

56. List the respiratory system in which antibiotic therapy is shown

1.	Pulmonary emphysema
2.	Croupous pneumonia
3.	Pulmonary bleeding
4.	Laryngeal swelling
5.	Catarrhal bronchopneumonia

57. What lung diseases correspond to the given symptoms?

1. Pulmonary bleeding	A. Body temperature is increased by 1-2°C. Cough is frequent muffled. Auscultation of the lungs reveal crepitation, wet wheezing.
2. Pulmonary emphysema	B. The blood flows from both nasal passages, light red with impurities of the bubble.
3. Catarrhal bronchopneumonia	C. A well-visible retraction of intercostal spaces and abdominal wall along the costal arc, where the depression ("inflammatory chute") is formed. In the percussion of the pulmonary field - tympanic or box sound.

58. What diseases of the upper respiratory tract correspond to these symptoms?

1. Bleeding from the nose	A. A slight increase in body temperature. The voice is hoarse, low. Strong, dry, sharp and painful cough.
2. Laryngitis	B. Periodic leakage from the nose (more often from one nostril) mucous purulent exudate. Leaks are exacerbated when head lower.
3. Frontitis	C. Leakage of blood from one or two nostrils. Blood flowing red, not foaming.

59. What diseases of the pleura correspond to these symptoms?

1. Pleuritis	A. Body temperature is elevated by 1-1.5 ° C during auscultation, friction noises are heard, which are exacerbated by pressure on the chest with a phonendoscope. Cough is weak, painful.
2. Chest dropsy	B. Asymmetry of the chest wall. On the damaged side of the percussion find a fairly strong box sound.

3. Pneumothorax	C. Blunt or dull sound in the chest area, the area of which is limited by the horizontal upper line. Body temperature is normal or reduced.
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60. Place in accordance with localization given diseases

1. Diseases of the upper respiratory tract	A. Hyperaemia et oedema pulmonum
2. Lung diseases	B. Hydrothorax
3. Diseases of the pleura	C. Tracheitis

Control questions (4 year of education)

1. Name the methods of therapy and describe them.
2. Describe epiotropic therapy.
3. Describe pathogenetic therapy.
4. Describe symptomatic therapy.
5. Define dispensation and describe its stages.
6. Describe the external methods of using medicines.
7. Describe the enteral methods of drug administration.
8. Describe the parenteral methods of drug administration.
9. Provision of medical assistance for esophageal obstruction in animals.
10. Stomach and prestomach lavage technique in animals.
11. Metal indication of the grid and introduction of magnetic rings.
12. Enemas, their types and application technique.
13. Diet therapy, its essence, features in diseases of various organs and systems.
14. Mechanotherapy, its essence, features of application.
15. Physiotherapy, its essence, features of application.
16. Protein therapy, its essence, features of application.
17. Describe novocaine blockades, indications and contraindications.
18. Mechanism of action, indications, method of using electrotherapy.
19. Mechanism of action, indications, method of using aerosol therapy.
20. Symptoms and syndromes for diseases of the cardiovascular system.
21. Differential diagnosis, treatment and prevention of myocardial diseases.
22. Describe the pathogenesis and symptoms of acute myocarditis.
23. Treatment and preventive measures for myocarditis.
24. What are the causes and symptoms of myocardosis.
25. Treatment and preventive measures for myocardosis.
26. Differential diagnosis of pericardial diseases.
27. Describe the etiology and pathogenesis of traumatic pericarditis.
28. Describe the causes, symptoms and preventive measures for hydropericarditis.
29. Describe the causes, symptoms and measures of therapy for endocarditis.
30. Differential diagnosis of heart defects.
31. Symptoms and syndromes of respiratory diseases.
32. Describe the causes, symptoms and measures of therapy for diseases of the respiratory tract.
33. Differential diagnosis of bleeding from the respiratory tract.
34. Describe the causes, symptoms and preventive measures for rhinitis.
35. Describe the etiology, pathogenesis of catarrhal bronchopneumonia
36. Describe the principles of diagnosis, therapy and prevention of catarrhal bronchopneumonia.
37. Causes and differential diagnosis of pneumonia.
38. Describe the principles of diagnosis, therapy and prevention of fibrotic (croupous) pneumonia.
39. What are the causes and symptoms of pulmonary edema.
40. Describe the principles of diagnosis, therapy and prevention of pulmonary edema.
41. What are the causes and symptoms of alveolar and interstitial emphysema.
42. Describe the principles of diagnosis, therapy and prevention of alveolar and interstitial emphysema.

43. Describe the etiology, pathogenesis of pleurisy.
44. Describe the principles of diagnosis, therapy and prevention of pleurisy.
45. Differential diagnosis, treatment and prevention of hydrothorax.

Control questions (5 year of education)

1. What are the common symptoms of liver diseases and what is their essence?
2. Describe the pathogenesis and symptoms of acute parenchymal hepatitis.
3. What are the principles of therapy and prevention in acute parenchymal hepatitis?
4. Describe the etiology and pathogenesis of toxic liver dystrophy.
5. Describe the pathogenesis and symptoms of liver amyloidosis.
6. Describe the causes, symptoms and preventive measures of liver cirrhosis.
8. What are the causes of ketosis in cows, ewes and sows?
9. Describe the pathogenesis of ketosis.
10. Describe the principles of diagnosis, therapy and prevention of ketosis.
11. Describe the etiology, pathogenesis of diabetes.
12. What are the causes of diabetes insipidus?
14. Describe the main causes and symptoms of myoglobinuria.
15. What are the principles of therapy and prevention of myoglobinuria?
16. Describe the etiology, pathogenesis of osteodystrophy and what pathological and anatomical changes does this disease cause?
18. What are the treatment and prevention of osteodystrophy?
19. Describe the causes, pathogenesis and symptoms of grassland tetany.
20. What are the principles of therapy and prevention of pasture tetany?
21. Name the most common hypovitaminoses among animals.
22. Describe the main causes, pathogenesis and symptoms of hypovitaminosis A.
23. What are the causes and symptoms of hypovitaminosis E?
24. Describe the causes, pathogenesis and symptoms of hypovitaminosis C.
25. What are the symptoms and therapy of hypovitaminosis K?
26. Name hypovitaminoses of group B.
27. Name the pathognomonic symptoms of group B hypovitaminosis.
28. Principles of therapy and prevention of hypervitaminosis in farm animals.
29. How dangerous is an excess of vitamins in the body of animals?
30. How are anemias of animal origin classified?
31. What are the symptoms of posthemorrhagic anemia?
32. Prevention of post-hemorrhagic anemia.
33. Describe the pathogenesis and symptoms of hemolytic anemia.
34. What are the treatments and prevention of hemolytic anemia?
35. What are the causes and pathogenesis of hypoplastic anemia?
36. What is the prevention of hypoplastic anemia?
37. What is the pathogenesis of aplastic anemia?
38. What are the causes of hemoglobinuria in cows?
39. Symptoms of postpartum hemoglobinuria in cows.
40. What is the therapy of hemoglobinuria in cows?
41. What are the causes of thrombocytopenia?
42. What are the therapy and prevention of thrombocytopenia?
43. What is hemophilia and what are its causes?
44. What is the pathogenesis of hemophilia?
45. What is hemorrhagic disease and what are its causes?
46. What are the symptoms of hemorrhagic disease?
47. Prevention of hemorrhagic disease.
48. Name the causes of pyelitis.
49. What are the symptoms of pyelitis?

50. What is pyelitis therapy?
51. What are the main causes and symptoms of bladder spasm?
52. What is the prevention of bladder spasm?
53. Describe the pathogenesis of bladder paresis and paralysis.
54. Name the symptoms of paresis and paralysis of the bladder.
55. Prescribe treatment for paresis and paralysis of the bladder.
56. What are the causes and symptoms of urocystitis?
57. What is the therapy for urocystitis?
58. The main causes of pathogenesis and symptoms of urethritis.
60. What is the prevention of urethritis?
61. Sunstroke, its etiology, diagnosis.
63. How to prevent sunstroke?
64. What are the symptoms of heatstroke? How to differentiate sunstroke from heatstroke?
66. Prescribe treatment for thermal overheating.
67. What are the symptoms of meningoencephalitis?
68. Prescribe treatment for meningoencephalitis.
69. What are the types of stress?
71. What is stress prevention?
72. Describe the causes and symptoms of neuroses.
73. What are the therapy and prevention of neuroses?
74. Describe the etiology and symptoms of meningomyelitis.
75. What is animal therapy and prevention for meningomyelitis?

8. Distribution of points received by students

The assessment of students' knowledge and skills is conducted by means of a 100-point scale and is converted into national grades according to Table 1 of the current *Exam and Credit Regulations at NULES of Ukraine*.

Student rating, points	National mark for the assembly results	
	exam	credits
90-100	excellent	pass
74-89	good	
60-73	satisfactorily	
0-59	unsatisfactorily	fail

To determine a student's rating in the discipline R_{DIS} (up to 100 points), the received assessment rating R_A (up to 30 points) is added to the academic performance rating R_{AP} (up to 70 points): $R_{DIS} = R_{AP} + R_A$.

9. Teaching and learning aids

- e-learning course of the discipline
<https://elearn.nubip.edu.ua/course/view?id=2259>

<https://elearn.nubip.edu.ua/course/view.php?id=2260>);

- lectures and presentations (in electronic form);
- textbooks, manuals, tutorials;
- guidelines for studying a discipline by full-time and part-time students; internship programmes of the discipline (if included in the curriculum).

10. Recommended sources of information.

Basic

1. Внутрішні незаразні хвороби тварин: підручник / Цвіліховський М.І., Береза В.І., Січкач В.С. та ін.; За ред. М.І. Цвіліховського. 3-є вид. К.: Аграрна освіта, 2014. 614 с.
2. Внутрішні хвороби тварин: практикум / Цвіліховський М.І., Бойко Н.І., Голопура С.І. та ін.; за ред. М.І. Цвіліховського. К.: ЦП КОМПРИНТ, 2016. 224 с.
3. Внутрішні хвороби тварин / Левченко В.І., Влізло В.В., Кондрахін І.П. та ін.; за ред. В.І. Левченка. Біла Церква, 2015. Ч.2. 610 с.

Secondary

1. Stephen J. Ettinger, Edward C. Feldman, Etienne Cote Textbook of Veterinary Internal Medicine. Elsevier Health Sciences, 2016. 2736 p.
2. R.A. McPherson, M.R. Pincus Henry's Clinical diagnosis and management by laboratory methods. Elsevier. 2022. 1663 p.
3. Richard W. Nelson, C. Guillermo Couto Small Animal Internal Medicine. Elsevier; 6th edition, 2019. 1608 p.
4. Leah Cohn, Etienne Cote Cote's Clinical Veterinary Advisor: Dogs and Cats. Mosby, 2019. 1680 p.

11. Information resources

1. <http://dspace.nubip.edu.ua:8080/jspui/> – Electronic library of NUBiP of Ukraine
2. <http://www.nbu.gov.ua/e-journals/nd/> – Scientific reports of the National University of Bioresources and Nature Management of Ukraine
3. <http://www.nbu.gov.ua/> – National Library of Ukraine named after V.I. Vernadskyi
4. https://www.merckvetmanual.com/Merck_Veterinary_Manual