Educational institution
"Vitebsk Order" Badge of Honor "State academy of veterinary medicine"

Vice-Rector for Academic Affairs of the UO VGAVM

_____ V.A. Zhurba

"_____" _____ 2016

PROGRAM

production
undergraduate practice
for 3rd year students
faculty of veterinary medicine, students
on the continuous integrated system of vocational education (NISPO)
by specialty
1 – 74 03 02 Veterinary medicine

2016 Nov.

COMPILERS:

A.I. Yatusevich, Rector of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Professor of the Department of Parasitology and Invasive Animal Diseases, Doctor of Veterinary Sciences, Professor;

E.A. Yushkovsky, Dean of the Faculty of Veterinary Medicine of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

E.B. Krivoruchko, Deputy Dean of the Faculty of Veterinary Medicine of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

Yu.A. Rybakov, Associate Professor of the Department of Obstetrics, Gynecology and Biotechnology of Animal Reproduction of the educational institutions "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, candidate of veterinary sciences;

V.A. Gerasimchik, Head of the Department of Diseases of Small Animals and Birds of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Doctor of Veterinary Sciences, Associate Professor;

V.N. Gisko, Associate Professor of the Department of Diseases of Small Animals and Birds of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

V.M. Egorov, Associate Professor of the Department of Diseases of Small Animals and Birds of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

E.F. Sadovnikova, Associate Professor of the Department of Diseases of Small Animals and Birds of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

V.P. Yakimenko, Associate Professor of the Department of Diseases of Small Animals and Birds of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

A.A.Verbitsky, Head of the Department of Microbiology and Virology of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

V.N. Aleshkevich, Associate Professor of the Department of Microbiology and Virology of an Educational Institution "Vitebsk Order "Badge of Honor" State Academy of Veterinary Medicine", Candidate of Veterinary Sciences, Associate Professor;

R.B. Korochkin, Associate Professor of the Department of Microbiology and Virology of the Educational Establishment "Vi- Tebsk Order of the Badge of Honor State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

S.I. Stasyukevich, Acting Head of the Department of Parasitology and Invasive Animal Diseases of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

V.S. Prudnikov, Head of the Department of Pathological Anatomy and Histology of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Doctor of Veterinary Sciences, Professor;

S.P. German, Associate Professor of the Department of Pathological Anatomy and Histology of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

A.P. Kurdeko, Head of the Department of Internal Non-Contagious Diseases of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Doctor of Veterinary Sciences, Professor;

E.I. Veremey, Head of the Department of General, Private and Operative Surgery of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Professor;

G.E.Dremach, Associate Professor of the Department of Epizootology of the Educational Establishment "Vitebsk Order" Badge Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

M.P. Babina, Head of the Department of Veterinary and Sanitary Expertise of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Doctor of Veterinary Sciences, Professor;

P.D. Gursky, Associate Professor of the Department of Veterinary and Sanitary Expertise of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

A.G. Koshnerov, Senior Lecturer, Department of Veterinary and Sanitary Expertise, Educational Establishment "Vitebsk Order of the Badge of Honor, State Academy of Veterinary Medicine";

K.P. Klimenkov, Associate Professor of the Department of Radiology and Biophysics of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

N.G. Pusher, Associate Professor of the Department of Pharmacology and Toxicology of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Candidate of Veterinary Sciences, Associate Professor;

I.A. Yatusevich, Professor of the Department of Pharmacology and Toxicology of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine, Doctor of Veterinary Sciences, Professor.

Recommended for approval:

Department of Obstetrics, Gynecology and Biotechnology of Animal Reproduction of the Educational Institution "Vitebsk Order of the Badge of Honor State Academy of Veterinary Medicine" (Minutes No. 3 dated October 21, 2015);

Department of Pathological Anatomy and Histology of the Educational Institution "Vitebsk Order of the Badge of Honor, State Academy of Veterinary Medicine" (protocol No. 12 dated September 24, 2015);

Department of Epizootology and Infectious Diseases of the Educational Establishment "Vitebsk Order of the Badge of Honor, State Academy of Veterinary Medicine" (Minutes No. 2 dated October 6, 2015);

Department of Parasitology and Invasive Animal Diseases of the Educational Institution "Vitebsk Order of the Badge of Honor, State Academy of Veterinary Medicine" (protocol No. 18 dated "03" November 2015);

Department of Internal Non-Contagious Animal Diseases of the Educational Establishment "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine (protocol No. 05 dated October 30, 2015);

Department of General, Private and Operative Surgery of the Educational Institution "Vitebsk Order of the Badge of Honor, State Academy of Veterinary Medicine" (Minutes No. 10 dated October 28, 2015);

Department of Veterinary and Sanitary Expertise of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine (Minutes No. 4 dated November 03, 2015);

Department of Diseases of Small Animals and Birds of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine (Minutes No. 17 dated November 6, 2015);

Department of Microbiology and Virology of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine (Minutes No. 21 dated October 29, 2015);

Department of Radiology and Biophysics of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine" (Minutes No. 1 dated January 29, 2016);

the Department of Pharmacology and Toxicology of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine (Minutes No. 11 dated November 20, 2015);

Council of the Faculty of Veterinary Medicine of the Educational Institution "Vitebsk Order of the Badge of Honor" State Academy of Veterinary Medicine" (Minutes No. 9 dated June 29, 2016).

EXPLANATORY NOTE

The leading role in the social and economic development of animal husbandry belongs to the training of highly qualified veterinarians who are able to solve complex problems and professionally perform veterinary work.

In accordance with the main activities and tasks of a graduate in the specialty 1 - 74 03 02 "Veterinary Medicine" in the continuous integrated system of vocational training (ISPO), students of the Faculty of Veterinary Medicine during their pre-diploma practice undergo practical training in prevention and treatment infectious, invasive and non-contagious diseases, master the work to increase the production of benign in veterinary and sanitary terms products and raw materials of animal origin and control their quality for compliance with current standards, protect the population from diseases common to humans and animals, protection of the territory from the introduction of infectious diseases, as well as protection of the environment from pollution.

The purpose of the industrial pre-diploma practice of students of the 3rd year of FVM NISPO is to consolidate and deepen theoretical knowledge and prepare the student for production activities, mastering professional methods and techniques.

The practice program includes the following tasks:

- learn to identify the causes of diseases in animals of different species in modern changing conditions of the industry;

- to master modern methods of diagnostics and differential diagnostics; ki disease;

- develop evidence-based treatment regimens for animals, evaluate their efficiency from the production, economic and environmental points of view;

- reasonable to carry out disease prevention, including group, with taking into account intensive livestock breeding technologies;

- consolidation of theoretical knowledge and acquisition of practical skills and skills in the disciplines included in the practice program.

In accordance with the goals and objectives of the industrial pre-diploma practice, the implementation of the approved program is mandatory.

Industrial pre-diploma practice of 3rd year FVM NISPO students is the most important stage of the educational process for the preparation of highly qualified veterinarians. It will consolidate and expand the knowledge, skills and practical skills acquired by students in the lecture, laboratory and practical course in clinical disciplines.

During the internship, students are required to:

- to carry out the tasks stipulated by the practice program;

- comply with the laws in force at enterprises, institutions and organizations internal regulations;

- participate in the social life of the team;

- promote and put into practice veterinary knowledge, advanced experience, the latest techniques and methods of work.

Practice in each of the disciplines begins with a preliminary acquaintance of students with the tasks, program, features of the place of practice.

ki, safety precautions, with the rules for collecting material and internal regulations for the period of work.

Industrial pre-diploma practice is carried out on the basis of state agricultural enterprises, district veterinary stations, diagnostic departments of district veterinary stations, laboratories of veterinary and sanitary examination in the market. In practice, in the specific production conditions of the republic, knowledge, skills and abilities in obstetrics, gynecology and biotechnology of animal reproduction are developed and consolidated; pathological anatomy, autopsy and forensics; organization and economics of veterinary business; epizootology and infectious diseases; parasitology and invasive diseases; internal diseases of animals; general and private surgery, ophthalmology; veterinary and sanitary examination; veterinary sanitation; diseases of small animals and birds; microbiology and immunology; virology; veterinary radiology, toxicology. In addition, students completing their theses conduct appropriate experimental research.

The practice program is compiled in accordance with the educational standard OSVO 1-74 03 02 - 2013. The practice is aimed at consolidating the knowledge and skills acquired in the learning process in the production environment, mastering the skills for solving social and professional problems, production technologies yami.

Specialist Competency Requirements
during the production pre-diploma practice *Requirements*
for academic competencies of a specialist:

- **AK-1. Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems.**
- **AK-2. Own system and comparative analysis. AK-3.**
- **Possess research skills.**
- **AK-4. Know how to work independently.**
- **AK-5. Be able to generate new ideas (be creative). AK-6. Have**
- **an interdisciplinary approach to problem solving.**
- **AK-7. Have skills related to the use of technical devices, information management and computer work.**
- **AK-8. Possess oral and written communication skills.**
- **AK-9. Be able to learn, improve your skills throughout your life. AK-10.**
- **Own the method of recognition of pathological processes.**
- **AK-11. Be able to apply various methods of research in the diagnosis. AK-12. Own**
- **the methodology of organizing preventive, diagnostic, therapeutic and veterinary and sanitary measures.**
- **AK-13. To be able to correctly apply at livestock enterprises zoohygienic requirements for keeping, feeding and caring for animals, herd reproduction, and obtaining high-quality products.**
- **AK-14. Be able to use economic methods in organizing all types of veterinary events.**

Requirements for the social and personal competencies of a

- ***specialist:* SLK-1. Possess the qualities of citizenship. SLK-2.**
- **Be capable of social interaction. SLK-3. Possess the ability for**
- **interpersonal communication. SLK-4. Learn health care skills.**
-
- **SLK-5. Be capable of criticism and self-criticism.**
- **SLK-6. Be able to work in a team.**

- **SLK-7. Be able to find the right solutions in extreme conditions. SLK-8. Have**
- **life support skills in conditions of long stay in remote settlements, extreme conditions.**
- **SLK-9. Possess skills in solving production problems in the conditions of market relations.**
- **SLK-10. Be able to quickly find the right solutions in the conditions of the occurrence of contagious and non-contagious animal diseases.**

Requirements for the professional competencies of a specialist:

Diagnostic, therapeutic and preventive activities

- **PC-1. Treat animals humanely, fix and kill animals during treatment, diagnostic and their other activities.**
- **PC-2. Collect anamnesis, identify the causes of animal diseases, conduct a clinical examination and examination of all types of animals, evaluate the results of laboratory tests and link it with the diagnosis.**
- **PC-3. Carry out diagnostics, treatment and prevention of diseases of the respiratory organs, digestive system, circulatory and hematopoietic organs, urinary system, metabolic disorders, gynecological diseases, surgical diseases, parasitic and infectious diseases with approved means.**
- **PC-4. Perform injections of drugs intramuscularly, subcutaneously, intradermally, intravenously, intraperitoneally, intraperitoneally, aerosol administration of drugs, catheterization, insertion of probes, stopping external and internal bleeding, treatment, dressing wounds, washing the stomach and intestines, setting enemas, conducting novocaine blockades .**
- **PC-5. Perform castration of males and females, surgical operations of any complexity, trimming of hooves, dehorning of young cattle, amputation of tails.**
- **PC-6. Prepare therapeutic and prophylactic solutions, ointments, powders, etc. and use them for treatment and prevention, including using medicinal plants.**
- **PC-7. Carry out anti-epizootic (general and special) measures: vaccinations, deworming, allergic and other studies and treatment of animals.**
- **PC-8. Carry out autopsy of animal corpses and draw up relevant documents.**
- **PC-10. Maintain professional accounting and reporting documentation and, in general, veterinary office work (journals, acts, protocols for the disposal of animals, etc.).**
- **PC-14. Organize and carry out disinfection, deratization, disinfestation, disinfestation, desacarization of livestock and other facilities using existing methods.**
- **PC-15. Based on knowledge of the rules of feeding and formulating diets, prescribe dietary feeding to sick animals.**
- **PC-16. Use physiotherapeutic agents, medicinal plants for therapeutic and prophylactic purposes.**
- **PC-17. Implement the requirements for life safety when carrying out veterinary activities, take into account the requirements for environmental protection, and take measures to prevent occupational injuries and occupational diseases.**
- **PC-18. Conduct inspection and veterinary and sanitary examination of livestock products, plant foods and take measures for their veterinary and sanitary assessment in order to prevent diseases transmitted through animal products.**

- **PC-19. To promote knowledge of veterinary medicine among the population and livestock workers.**
- **PC-20. To master the methods of searching and using scientific and technical information, to put into practice the achievements of science and the best practices of veterinary medicine, to work independently with educational, scientific, regulatory, reference literature in order to use it to solve professional problems.**
- **PC-21. Use information technology in solving production tasks.**

Research activities

- **PC-22. Engage in analytical and research activities in the field of veterinary medicine.**
- **PC-23. Participate in the creation of modern information technologies in order to automate management activities.**
- **PC-24. To explore the development trends of modern forms of agricultural production stva.**
- **PC-25. Work with scientific, reference and special literature. PC-26. Conduct research on the effectiveness of the applied methods and methods of treatment and diagnosis.**
- **PC-27. Explore animals.**

Organizational and managerial activities

- **PC-34. Control and maintain labor and production discipline. PC-35. Draw up documentation (work schedules, instructions, plans, applications, etc.), as well as reporting documentation in accordance with established forms.**
- **PC-36. Collaborate with related professionals. PC-37.**
- **Analyze and evaluate collected data.**
- **PC-39. Negotiate with other stakeholders. PC-40. Prepare reports, materials with presentations.**
- **PC-41. Use global information resources. PC-42. Own modern means of telecommunications.**

GOALS AND OBJECTIVES OF INDUSTRIAL UNDERGRADUATE PRACTICE IN DISCIPLINES: Obstetrics, Gynecology and Biotechnology of Animal Reproduction ***Target:*** **consolidate theoretical knowledge and acquire practical skills and skills in the diagnosis, treatment and prevention of obstetric and gynecological diseases of animals, in artificial insemination and stimulation of the sexual function of females.**

Tasks:

- **diagnose pregnancy and infertility;**
- **to study the methodology for drawing up an action plan for the prevention of infertility in livestock and the elimination of mastitis in farm animals on the farm;**
- **to master the diagnosis of obstetric and gynecological diseases and the mammary gland;**
- **to study the organization of work of maternity wards;**
- **master the techniques of obstetrics and first aid for newborns;**
- **to master methods of treating animals with mastitis and obstetric and gynecological diseases;**
- **to study and analyze the work of a veterinarian-gynecologist, an operator for artificial insemination of animals;**
- **master the technology of artificial insemination of cattle and pigs, methods of stimulating the sexual function of females;**
- **take part in the development and implementation of various stages and activities of obstetric and gynecological medical examination of a herd of dairy cows on the farm.**

Pathological anatomy, autopsy and forensics ***Target:*** **consolidate knowledge on the definition of pathological changes in organs and tissues of dead animals with a pathoanatomical diagnosis and a conclusion on the causes of death.**

Tasks:

- **be able to determine post-mortem changes in organs and tissues of animals and differentiate them from intravital pathological processes;**
- **to study morphological changes in organs and tissues of animals in diseases of various etiologies;**
- **master the differential diagnosis of monoinfections and associated (mixed) diseases;**
- **be able to correctly select and fix pathological material for virological, bacteriological, histological, luminescent and electron microscopic studies;**
- **consolidate knowledge on the preparation of documentation based on the results of the autopsy.**

Epizootology and infectious diseases

Target: **consolidate theoretical knowledge and acquire practical skills and skills in diagnosing, preventing and eradicating infectious diseases, treating animals suffering from infectious diseases.**

Tasks:

- **to teach students how to monitor the epizootic situation in the region of internship,**
- **carry out the development of a system of measures to prevent the occurrence of infectious diseases, schemes for the rehabilitation of dysfunctional farms, methods for conducting basic diagnostic and preventive measures.**

Parasitology and invasive diseases

Target: **consolidate theoretical knowledge and acquire practical skills in diagnosis, treatment and prevention of parasitic diseases.**

Tasks:

- **establish the main causes of the spread of parasitic diseases of animals;**
- **identify clinical signs and issues of pathogenesis in the diagnosis of the main parasitoses of animals;**
- **carry out reliable diagnostics of parasitic diseases of animals, taking into account the results of laboratory tests;**
- **provide therapeutic and preventive care to sick animals with parasitic diseases;**
- **develop a plan of preventive measures in relation to specific technologies for keeping animals.**

Internal diseases of animals

Target: **consolidate theoretical knowledge and develop skills to clarify causes of diseases, animal research, diagnosis, therapeutic and preventive measures.**

Tasks:

- **learn to identify the causes of internal diseases in animals of different species in modern conditions of the industry;**
- **to master modern methods of diagnostics and differential diagnostics of diseases, including instrumental and using IT-technologies;**
- **develop evidence-based schemes for the treatment of productive animals, evaluate their effectiveness from the production, economic and environmental points of view;**
- **it is reasonable to carry out prevention of internal diseases, including group ones, taking into account intensive livestock breeding technologies.**

General and private surgery, ophthalmology

Target: **to master the ethics and deontology of a veterinarian and to develop clinical thinking to establish etiological factors, the development of pathogenesis, the diagnosis of surgical, orthopedic and ophthalmological pathology of animals to identify the outcome of the disease.**

Tasks:

- **acquire skills, knowledge about the impact of surgical pathology on the quantity and quality of meat and dairy products and raw materials;**
- **to study the presence of injuries and its classification on livestock farms and complexes, causing economic damage;**
- **acquire diagnostic skills to establish the clinical manifestation of the general and local reaction of the animal organism to injury and infection;**
- **develop the skills and ability to diagnose the manifestation and development of a surgical infection in different animal species;**
- **to master the specific features of the wound process in animals;**
- **acquire the skills of differential diagnosis of closed mechanical tissue damage, as well as necrosis, gangrene, fistulas and ulcers;**
- **work out and consolidate the diagnosis of clinical manifestations of skin diseases;**
- **acquire the skills of differential diagnosis of diseases of bones, joints, tendons, bursas, muscles and nervous system;**

- **acquire skills in diagnosing the clinical manifestation of neoplasms in animals;**

- **develop skills and abilities in diagnosing the clinical manifestations of diseases of the eyes, hooves and hooves.**

Organization and economics of veterinary business

Target: **acquire knowledge and skills in the management of the veterinary service economy, organization, planning and implementation of preventive, curative, veterinary-sanitary and other veterinary activities.**

Tasks:

- **study the organizational structure of the state veterinary services of the district (city), veterinary services of legal entities engaged in veterinary activities (agricultural organizations, industrial livestock complexes, etc.);**

- **acquire skills and abilities in planning veterinary activities, conducting veterinary office work, conducting veterinary-sanitary and epizootological examination of livestock farms, calculating veterinary economic indicators;**

- **study the organizational and professional activities of the veterinary service employees in accordance with the current legislative acts, instructions, recommendations.**

Veterinary and sanitary examination

Target: **master the techniques and methods of veterinary and sanitary examination of products products of animal and vegetable origin on the market.**

Tasks:

- **to study the structure of the laboratory of veterinary and sanitary examination of the market;**
- **study the current technical regulatory legal acts for the veterinary and sanitary examination of food raw materials and products in the markets;**
- **to master the methods of conducting veterinary and sanitary examination of products of animal and vegetable origin on the market.**

Veterinary sanitation

Target: **master the methodology of conducting veterinary and sanitary measures (disinfection, disinfestation and deratization) aimed at sanitation (disinfection) of objects of veterinary supervision from pathogens of infectious and parasitic diseases, extermination of insects and rodents, obtaining livestock products of high sanitary quality.**

Practice objectives:

- **to consolidate practical skills in the technique of carrying out veterinary and sanitary works (disinfection, disinfestation, disinfestation and deratization) at the objects of veterinary supervision, methods for determining active substances in various disinfectants;**
- **master the methods of quality control of disinfection, disinfestation, disinfestation and deratization.**

Diseases of small animals and birds

Target: **work out and consolidate in production conditions practical knowledge and skills gained in the process of learning to find out the causes of diseases in dogs, cats, fur-bearing animals and rabbits, exotic and zoo animals and birds, fish and bees, treatment, prevention and elimination of diseases.**

Tasks:

- **to establish the causes of disease in dogs, cats, fur-bearing animals and rabbits, exotic and zoo animals and birds, bees and fish;**
- **make a diagnosis on the basis of epizootological data, clinical signs, pathoanatomical changes and laboratory results;**
- **provide medical assistance to sick animals using specific, etiotropic, pathogenetic, symptomatic and other types of therapies;**
- **to develop and carry out veterinary measures aimed at the prevention and elimination of contagious and non-contagious diseases of small animals.**

Microbiology and immunology, virology

Target: **consolidate and expand knowledge, skills and practical skills, semi-taught by students in a lecture and practical course on the systematics, morphology, physiology, genetics and ecology of microorganisms, the doctrine of infection and immunity, the theoretical and practical foundations of diagnosing infectious diseases, and the principles of immunological research.**

Tasks:

- **get acquainted with the layout and equipment of the bacteriological laboratory, the rules of work and safety precautions, the methods used in laboratory practice;**
- **to master the methods of preparing preparations-smears from bacterial cultures and preparations-imprints from pathological material, simple and complex methods of staining;**
- **get acquainted with the composition and technique of preparing nutrient media, with the technique of inoculation and re-seeding of microorganisms on nutrient media;**
- **to study the methods of infection and autopsy of laboratory animals, the rules for taking the shipment of pathological material;**
- **to master the technique of setting RID, PA, PZGA, RP, RSK, ELISA in order to identify pathogens and detect antibodies in the studied blood sera;**
- **master the methods of laboratory diagnostics of infectious diseases: viral (rabies, bovine leukemia, rotavirus and coronavirus infection of cattle, classical swine fever, Aujeszky's disease, Newcastle disease, IRT (infectious rhinotracheitis), infectious bronchitis of chickens, parvovirus swine infection) bacterial (staphylococcosis, streptococcosis, salmonellosis, colibacillosis, tuberculosis, hemophiliasis, pasteurellosis, emphysematous carbuncle, necrobacteriosis, anthrax, brucellosis, bordetellosis, malignant edema, listeriosis, swine erysipelas).**

Veterinary Radiology

Target: **consolidate and deepen knowledge, develop practical skills and abilities niya obtained in the study of the discipline "Veterinary Radiology".**

Tasks:

- **get acquainted with the work of the radiation control unit,**
- **measure and control the level of gamma background, samples of products for the content of cesium-137 to provide the population with benign in terms of radiation products of animal husbandry and crop production.**

Toxicology

Target: **to work out and consolidate the basic skills for conducting toxicology research, diagnostics, treatment and prevention of poisoning in animals.**

Tasks:

- **to study the properties of toxic substances and their effect on the body of animals, birds, fish and beneficial insects;**
- **learn to carry out diagnostics, treat and prevent poisoning;**
- **master the methods for determining toxic substances in feed, water, livestock products;**
- **learn to develop measures to prevent environmental pollution with pesticides.**

PRACTICE CONTENT

The order of passage, organization and management of practice The duration of the industrial pre-diploma practice for students of the 3rd year of NISPO is 6 weeks (total 324 hours / 15 credits):

- **one week – diagnostic department of the regional veterinary station (acquaintance with the diagnostic department, carrying out some studies provided for by the program);**
- **one week - laboratory of veterinary and sanitary examination in the market;**
- **four weeks – district veterinary station or agricultural enterprise.**

During the period of practice, students are required to fully complete the program in obstetrics, gynecology and biotechnology of animal reproduction; pathological anatomy; organization and economy of veterinary business; epizootology and infectious diseases; parasitology and invasive diseases; internal diseases of animals; general and private surgery, ophthalmology; veterinary and sanitary examination; veterinary sanitation; diseases of small animals and birds; microbiology and immunology, virology; veterinary radiology; toxicology. At the same time, an important point is the acquisition by students of practical skills in these disciplines in accordance with the given tasks for them.

Students studying on the basis of an agreement on targeted training, practice in the farms with which the agreement is concluded.

Control over the internship is carried out 1 time by teachers of the departments assigned to the given district. In the diary, the inspectors should make an entry with comments and suggestions on the passage of the 3rd year student (s) of NISPO of industrial pre-diploma practice.

Before leaving for practice, an appropriate briefing is carried out, a bypass sheet is signed and submitted to the educational and methodological department, and then the student receives a travel certificate.

The organization of work of students during the period of industrial pre-diploma practice is reduced to the following provisions:

- **the student arrives at the place of practice at the time specified in the travel certificate and applies to the head of the practice to get a job, overalls, etc. district veterinary station, laboratory of veterinary and sanitary examination) head of the laboratory or department;**

- **gets acquainted with the internal regulations of the farm, veterinary institution, job descriptions of the specialist whose duties he will perform during the period of practice, is instructed in safety and labor protection at the workplace.**

Changing the time and place of internship is carried out only with the permission of the dean's office of the faculty. To do this, the student must submit a written reasoned statement and receive a new travel certificate.

At the end of the internship, the student should receive:

one) *characteristic,* certified by the signature of the head of the economy and fastened under the seal of the economy;

2) *certificate* that the student was not in office (*not allowed provision of an extract from the order).*

Within 7 days after the end of the practice, students of the 3rd year of NISPO finalize the reporting documentation (diary with the signature of the examiner of the practice, report, characteristic, collected in a folder) and register in the educational and methodological department. Students completing their theses provide only a diary and a description, certified by the signature of the head of the farm and sealed with the seal of the farm, collected in a folder.

Samples of cover sheets of reporting documentation are attached (*applications 1, 2, 3)*...

After registration, the reporting documentation is sent to the appropriate department for verification. After checking and giving a detailed review, the reporting documentation should be protected at the interdepartmental commission for the protection of reporting documentation for the industrial pre-diploma practice of 3rd year students of NISPO with an assessment. The grade is put in the statement and the record book by the teacher who checks the reporting documentation. The terms of the defense are determined by the dean's office of the faculty of veterinary medicine.

A travel certificate with the appropriate marks and a certificate stating that the student was not in the position is submitted to the accounting department of the head of the groups within 3 days after arrival from practice.

A student who has not completed the main volumes of practice, who has presented a negative reference or received an unsatisfactory grade during the defense at the inter-departmental commission, is subject to expulsion from the academy.

Obstetrics, gynecology and biotechnology of animal reproduction

As a result of the internship, the student must *know:*

- **modern technologies for artificial insemination of animals and transplantation of embryos, obtaining, evaluating, diluting, storing and using animal sperm;**
- **methods for diagnosing pregnancy in animals, the physiology of childbirth and the postpartum period;**
- **pathology of pregnancy, childbirth and the postpartum period, methods of treatment and prevention in obstetric pathology, childbirth operations;**
- **pathology of the genital organs in infertile females and males, methods of treatment and prevention in gynecological and andrological pathology;**
- **pathology of the mammary gland; methods of treatment and prevention of mastitis and mammary gland dysfunction;**
- **methods of hormonal control over sexual function for the prevention of infertility in females and breeding males;**

be able to:

- **conduct a study of the genital organs of animals and the mammary gland of females;**
- **carry out artificial insemination, embryo transplantation;**
- **to diagnose pregnancy;**
- **carry out diagnostic, therapeutic and preventive measures for diseases of the mammary gland, infertility, pathology of pregnancy, childbirth and the postpartum period in animals;**

own:

- **methods of obstetric and gynecological examination of the animal;**

- **techniques for providing medical care to animals with obstetric and gynecological pathology and diseases of the mammary gland;**
- **biotechnological methods of reproduction of animals.**

Pathological anatomy, autopsy and forensics Based on the results of the internship, the graduate should *know*:

- **pathological morphology of post-mortem changes and typical pathological processes: atrophy, dystrophy, necrosis, impaired blood and lymph circulation and tissue fluid metabolism, inflammation, immunomorphology, adaptive and compensatory processes, tumors;**
- **pathological anatomy, non-contagious and contagious diseases of animals, their differential pathomorphological diagnostics;**
- **organization of the opening place; its neutralization, disposal of corpses;**
- **safety precautions during autopsy;**
- **rules for taking and fixing pathological material for histological, bacteriological, virological and chemical-toxicological studies;**
- **the technique of autopsy of the corpses of various animal species;**
- **registration of documentation of opening; *be able to:***
- **correctly open the corpses of different animal species and determine pathoanatomical changes in organs and tissues;**
- **substantiate clinical and anatomical relationships;**
- **to make a preliminary nosological diagnosis in case of mono- and associative course of diseases;**
- **implement safety and environmental protection;**
- **carry out the neutralization of corpses and cadaveric material;**
- **correctly draw up documents for a pathoanatomical autopsy (diagnostic and forensic veterinary);**
- **select and fix pathological material for histological examination and issue a cover letter;**

own:

- **technique of autopsy and disposal of animal corpses;**
- **knowledge of pathomorphological differential diagnosis of diseases. *Place of practice:* regional veterinary station for the control of animal diseases here, an agricultural enterprise.**

When passing the industrial pre-diploma practice in the discipline "Pathological anatomy, autopsy and forensic examination", a 3rd year student of NISPO FVM must:

- **to study the organization of the pathoanatomical work of the veterinary service of the farm, regional veterinary stations: documentation, the place of autopsy and disposal of corpses (utilization, biothermal pit), compliance with safety procedures when autopsy of animal corpses, environmental protection;**
- **master the methods of autopsy of the corpses of large and small animals (examination and description of organs, taking pathological material for histological, bacteriological, virological, chemical-toxicological and myco-toxicological studies, fixing it, packaging and sending it to the diagnostic department of the veterinary station), preparing a cover letter ;**

- **under the guidance of a veterinarian, the student must open at least 3 corpses of animals, draw up pathoanatomical diagnoses and make preliminary nosological diagnoses;**
- **learn the rules for recording a diagnostic autopsy; draw up one autopsy protocol according to the scheme of the department and attach it to the report.**

During the pre-diploma internship, students consolidate theoretical knowledge, get acquainted with the organization of the pathological and anatomical work of the veterinary service of the veterinary station and the farm, organize the place for dissection of animal corpses, methods of disposing of corpses, practice the technique of dissection of the corpses of different types of animals and draw up documentation based on the results of the diagnostic examination. autopsy.

Epizootology and infectious diseases

Based on the results of the internship, the graduate should:

- **to study the epizootic situation in the farm and the region over the past 3-5 years, using for this purpose the epizootic map of the region, the epizootic journal, reports of forms 12 veterinary diseases (Ministry of Agriculture and Food), 4 vet (Ministry of Agriculture and Food), the results of laboratory studies, acts on carrying out anti-epizootic measures;**
- **analyze the plan of anti-epizootic measures for the district, agricultural organization;**
- **to study the structure of the herd of animals on the farm by species and technological groups, the conditions for their maintenance, feeding and operation, the veterinary and sanitary quality of feed;**
- **determine the availability of veterinary drugs (veterinary drugs, disinfectants, devices, tools, etc.), assess the storage and use of veterinary drugs;**
- **to master the rules of personal hygiene and safety precautions when working with sick and suspicious animals for infectious diseases and when working with disinfectants.**

During the period of internship, students must acquire practical skills and abilities in:

- **the technique of conducting tuberculinization in various animal species for the purpose of their examination for tuberculosis;**
- **the technique of introducing biological preparations (vaccines, sera);**
- **techniques for taking blood samples from various animal species for serological and hematological studies;**
- **drawing up a plan of anti-epizootic measures and an action plan for the elimination of an infectious disease;**
- **conducting a clinical examination of sick animals with thermometry, dividing animals into groups (sick animals, suspicious for the disease, suspected of being infected);**
- **treatment of sick animals using specific, etiotropic, pathogenetic and symptomatic therapies;**
- **destruction (utilization) of corpses, decontamination of manure and other environmental objects during an outbreak of infectious diseases;**
- **preparation of disinfectant solutions, disinfection and sampling to control the quality of disinfection;**
- **carrying out deratization, disinfestation and deodorization.**

When undergoing industrial pre-diploma practice in the diagnostic department, the student must *explore:*

- **the structure of the diagnostic department and the methods of laboratory research used in the departments of bacteriology, virology, serology, chemotoxicology, radiology and parasitology;**
- **technique for obtaining, preserving and sending biological and pathological material from animals for research;**
- **rules for the preparation of reagents and laboratory glassware for laboratory analysis, as well as the requirements of safety regulations in this case;**
- **methods of preparation, staining of smears and their microscopy, preparation of paints and nutrient media for the cultivation of microorganisms;**
- **setting RP, RID, RA, RNGA, RTGA, RSK, ELISA and other serological tests in order to establish the titer of specific antibodies to pathogens of infectious diseases.**

Parasitology and invasive diseases

As a result of the internship, the student must *know:*

- **life cycles of development of helminths, protozoa, mites and insects, as well as the timing of their development to the invasive and imaginal stages for correct scientifically based planning of activities;**
- **clinical manifestation of parasitosis in all animal species;**
- **methods for conducting diagnostic tests for protozooses, helminthiases and arachnoentomoses;**
- **drugs for the treatment of animals with parasitosis and chemotherapy drugs used for disinfestation and disinfestation;**
- **methods and timing of forced and prophylactic, imaginal and preimaginal deworming in conventional farms and industrial-type livestock complexes with intensive technology;**
- **methods for labor protection of veterinary specialists and livestock workers;**
- **issues of nature protection; *be able to:***
- **to collect anamnesis, select and examine pathological material in order to diagnose helminthiases, protozoosis and arachnoentomoses;**
- **to make, fix, stain and examine preparations for the detection of piroplasmids, cryptosporidium, Trichomonas, balantidia, etc.;**
- **differentiate helminths, mites, insects, protozoa to genus and species (strongylate to family);**
- **prepare dosage forms for individual and group use by their animals;**
- **draw up short-term and long-term plans for recreational activities to eliminate and prevent parasitosis in the economy, district, region;**
- **neutralize the remains of strong reagents used for treatment and chemoprophylaxis, wastewater, etc., in order to prevent environmental pollution;**

own:

- **methods of intravital and post-mortem diagnostics of invasive diseases;**
- **methods for taking samples of faeces and conducting research on parasitosis;**
- **the method of conducting an incomplete helminthological autopsy of corpses;**

- **preparation of blood smears of animals and diagnostic testing for babesiosis, piroplasmosis, anaplasmosis. When indicated, treatment of sick animals;**

- **a method for selecting material for research on intestinal protozooses and, if indicated, treatment with antiprotozoal agents;**
- **acarological examination of animals for sarcoptoidosis, demodicosis and otherand scabies diseases; organization of therapeutic and prophylactic treatment of animals;**
- **preparing and conducting individual or group treatment of animals with therapeutic and prophylactic drugs;**
- **the methodology for the use of fixed assets for the disinfestation of livestock premises, the external environment and methods for their application.**

During the internship period, students must:

- **master the technique of taking samples of faeces and conducting research on parasitosis;**

- **to carry out an incomplete helminthological autopsy;**
- **prepare and carry out group feeding of therapeutic and prophylactic feed mixtures, as well as individual giving of chemotherapeutic drugs;**
- **prepare blood smears of animals and conduct a diagnostic test for babesiosis, anaplasmosis. When indicated, treat sick animals;**
- **master the method of selecting material for research on intestinal protozooses and, if indicated, give antiprotozoal drugs;**
- **conduct an acarological examination of animals for sarcoptoidosis, demodicosis and other scabies diseases and organize therapeutic and prophylactic treatment of animals;**
- **conduct a study of horses and cattle for the presence of gadfly eggs and organize treatment and preventive work. Examine other animals for entomoses. When identifying sick animals, take therapeutic and preventive measures.**

Internal diseases of animals

After completing an internship in internal animal diseases, the student must *know:*

- **the basics of general and private prevention of animals in conditions of intensive animal husbandry;**
- **methods of veterinary therapy, technique and methods of treatment, writing prescriptions and preparation of dosage forms;**
- **tools and instruments for medical and prophylactic procedures;**

- **etiology, pathogenesis, symptoms and syndromes, diagnosis, treatment and prevention of internal animal diseases.**

The student must *be able to:*

- **to carry out medical manipulations in the treatment of animals;**
- **identify the causes and conditions for the occurrence of internal diseases of animals;**
- **prescribe treatment and monitor its effectiveness;**
- **develop plans for preventive measures, give them a scientific and economic justification;**
- **Correctly maintain clinical documentation;**

- **draw up acts of treatment of animals in order to prevent internal diseases;**

- **draw up applications for medicines and economically justify their purchase;**
- **promote the achievements of science and best practices in the field of animal husbandry and veterinary medicine.**

During the internship, the student must complete the following amount of work:

- **to study the situation of internal diseases of animals in the farm over the past 1-2 years, to analyze the feeding and maintenance of animals, to evaluate the effectiveness of treatment and preventive measures for internal pathology;**
- **to determine the main causes, their connection with the conditions of animal husbandry, to master the methods of diagnosis and differential diagnosis of the most common diseases of young animals - malnutrition, dyspepsia, gastroenteritis, bronchopneumonia, rickets, anemia, hypovitaminosis, hypomicroelementosis, etc.;**

- **to establish the main causes of the most common internal diseases of adult cattle (acidosis, hypotension, rumen tympania, traumatic reticulitis and its complications, hepatitis and hepatosis, ketosis, osteodystrophy), pigs (gastroenteritis, gastric ulcer, hepatitis and hepatodistrophy , obesity), horses (stomatitis, alveolar emphysema, acute gastric dilatation, intestinal flatulence, myoglobinuria, obesity), their relationship with the conditions of keeping, feeding and exploitation, to master the methods of clinical and laboratory diagnostics;**
- **to treat animals with internal diseases using etiotropic, pathogenetic, symptomatic, substitution therapy, to evaluate the effectiveness, incl. economic, medical measures, to develop a plan of preventive measures in relation to a specific technology of animal husbandry.**

Students performing a thesis, during the practice, conduct scientific and production experiments on the research topic being developed.

On the basis of the work done, the student must acquire the following practical skills in:

- **clinical study of sick animals;**
- **rules for selecting, preparing and sending material (blood, urine, milk, faeces) for laboratory testing;**
- **therapeutic technique (enteral and parenteral administration of drugs, the appointment of physiotherapeutic procedures, the use of instrumental methods);**
- **diagnosing and prescribing treatment for internal diseases of animals;**
- **development of plans for therapeutic and preventive measures in specific conditions of the economy, their economic assessment;**
- **morphological and biochemical examination of blood from 10-15 animals, physicochemical examination of urine from 10-15 animals and biochemical analysis of at least 5 feed samples;**
- **maintaining clinical and reporting documentation, conducting veterinary educational work.**

Students take part in all veterinary activities carried out on the farm, in particular, clinical examination of productive animals, analysis

its results, organization of preventive work, etc. During the internship, students carry out outpatient reception and treatment of sick animals, perform the necessary laboratory tests of blood, urine, feces, make appropriate entries in the journal, medical history, individual dispensary card, etc.

General and private surgery, ophthalmology

The student must *know:*

- **surgical, ophthalmic pathology;**
- **etiopathogenetic bases for the manifestation of the course and outcome of the disease;**
- **biological and clinical patterns of regenerative and restorative processes of the animal organism;**
- **principles of therapy and prevention of sick animals; *be able to:***
- **to diagnose surgical and ophthalmic diseases;**
- **carry out diagnostic and therapeutic procedures for sick animals;**
- **observe personal hygiene and safety precautions when working with animals;**
- **work with diagnostic physiotherapy equipment and devices; *own:***
- **surgical reflexes, ethics and deontology of a doctor of veterinary medicine;**
- **general diagnostic methods of animal research;**
- **the technique of surgical operations on any part of the body of the animal. Passage of industrial pre-diploma practice by students of the 3rd year of NISPO in the discipline "General and private surgery, ophthalmology" should be carried out according to the following plan:**

No. p / p	Production section guiding practices	An object studying	Acquired Skills	Material security reading
one	2	3	4	5
one.	Organize surgical work	farms, com-complexes, fermeric and crestyanskie hofarming	Organization of jobs on farms and complexes, etc. farms, veterinary-sanitary room status scheny for animals. Technique for safe work with animals, medicinal drugs and drugs for disinfection	Necessary equipment for the operation of the veterinary unit (pharmacy ka, fixation machine tools, the presence of cold and hot water, sewerage, machines, work mode, techno milking logic, etc.)
2.	Injuries and his classfiction	All types of living votnyh	To study the presence of animal injuries, the establishment of causes, economic losses and its prevention	Specialist. clothing, medical nye tools and devices
3.	Clinical manifestation local and general reaction organization ma animal for injury and infections	All types of living votnyh	Conduct a clinical study of animals (T, P, D, R). To study the local status and differentiate aseptic inflammation from septic. Methods of treatment	Veterinary instruments cops for research ny (syringes, needles). Antiseptic dis-creations, tampons, sal-Fetki, rubber perchats

one	2	3	4	5
4.	Surgical sky infection tion and her client nic manifestations (abscess, phlegmon, sepsis)	All types of living votnyh	Conduct a clinical study of animals (T, P, D, R). Examination of mucous membranes, lymph nodesExplore. local status. Differen- quote purulent, putrefactive nuh, anaerobic infections. Make a diagnosis (ab- scess, phlegmon, sepsis). Provide treatment and develop preventive measures	Veterinary instruments cops (syringes, needles, antiseptic race- creations, novocaine, there- pony, napkins, resi- new gloves)
5.	Open mechanical damage tissues (wounds). Species the benefits of those early process	On any kind animal	Acquire the skills to determine the classification of wounds, the morphology of the wound, the clinical symptoms of the wound. Examination of a wounded animal. Biology of the wound process in different animal species. Healing by primary, secondary intention and under eschar	Surgical in- instruments (syringes, needles). Antiseptic solutions, dressing eye material: bin- you, wipes, tampons. novocaine solution, latex gloves
6.	Closed mechanical damage fabrics	On any kind animal	Acquire the skills of diagnosing bruises, the degree of bruising. Hematomas and their classification. Lymphoextravasate, hemolymphextravasate. Stretching, tearing, jarring and squeezing. Diagnosis, treatment and prevention	Surgical in- tools, solution novocaine. Antiseptic ki, tampons, napkins, syringes, needles
7.	Skin diseases	On any kind animals	Acquire skills and abilities to study the general clinical signs of skin disease (itching, swelling of the skin, emphysema, fissures, bedsores, gangrene, eczema, skin rashes, dermatitis, elephantiasis, folliculitis, furuncle, carbuncle). Diagnosis and differential diagnosis. Methods of treatment and prevention.	Surgical in- instruments (syringes, needles). Antiseptic solutions, novoca- in, tampons, wipes, latex gloves
eight.	Diseases stey, joint wow, dry- li burs, mu- cheekbones	On any kind animals	Learn to differentiate various types of fractures, diagnose diseases of the joints, tendons, burs, muscles and predict the prognosis. Conduct treatment and prevention.	Surgical in- instruments (syringes, needles). Antiseptic solutions, novoca- in, tampons, wipes, latex gloves

one	2	3	4	5
9.	Thermal and chemical damage	On any kind animals	Learn to identify burns, frostbite, differentiate chemical burns, radiation injuries. Treatment and prevention.	Surgical in-instruments (syringes, needles). Antiseptic solutions, novoca-in, tampons, wipes, latex gloves
10.	foreign body in organ nizme	On any kind animals	Learn to determine the body's reaction to a foreign body. Functional and other disorders caused by foreign bodies, migration of foreign bodies. Removal of foreign bodies.	Medical instruments you. Antiseptic solutions, tampons, napkins. anesthetics, latex gloves.
eleven.	Diseases cro-venous and lymphatic sky vessels	On any kind animals	Acquire skills in the differential diagnosis of circulatory diseases systems (arteritis, phlebitis, thrombo-phlebitis, lymphangitis, lymph-nodulite). Methods of treatment and prevention.	Medical instruments you. Antiseptic solutions, tampons, napkins. anesthetics, latex gloves.
12.	Ear diseases	On any kind animals	Acquire ear diagnostic skills (wounds and hematomas, inflammation of the parotid gland, otitis media). Methods of treatment and prevention	Medical instruments you. Antiseptic solutions, tampons, napkins. anesthetics, latex gloves
thirteen.	Hernia	On any kind animals	differential diagnostic hernia stick. Methods of treatment and prevention	Medical instruments you. Antiseptic solutions, tampons, napkins. anesthetics, latex gloves
14.	Diseases tooth-bov	On any kind animals	Obtain skills in examining the oral cavity in animals (the state of wear and tear and diseases of the teeth, bite, mucous membrane)	Medical instruments you. Antiseptic solutions, tampons, napkins. anesthetics, latex gloves
15.	Diseases nervous systems	On any kind animals	Acquire installation skills diagnosis diseases nervous systems (neuritis, neuralgia, sciatica, cuts and paralysis, brain injuries, concussions and bruises of the spinal cord). Diagnosis, treatment and prevention	Surgical in-instruments (syringes, needles). Antiseptic solutions, novoca-in, tampons, wipes, latex gloves

one	2	3	4	5
sixteen.	Newly ing	On any kind animals	Work out the differentiation of benign and malignant tumors. The ways treatment and prevention. benign (papilloma, adenoma, fibroma, lipoma, chondroma, osteoma, myoma, angioma, melanoma). Malignant (sarcoma, angiosarcoma, malignant melanoma)	Surgical instruments (syringes, needles). Antiseptic solutions, novocain, tampons, wipes, latex gloves
17.	eye diseases	On any kind animals	Acquire skills in diagnosing diseases of the orbit of the eyelids, lacrimal apparatus, conjunctiva, cornea, retina, internal parts eye apples. Mass eye diseases (rickettsiosis, thelaziosis, keratoconjunctivitis). Treatment and prevention.	Surgical instruments (syringes, needles). Antiseptic solutions, novocain, tampons, wipes, latex gloves
eighteen.	Diseases co- torture and cops- calf	Large horn- ty cattle, lo- shadi, small horned cattle, pigs	Work out the differential diagnosis of inflammation of the base of the skin of the hooves and hooves in different animal species. Phlegmon of the corolla, crumb and finger. Purulent and aseptic inflammation of the shuttle bursa. Damage to hooves by necrobacillosis and foot rot. Care of hooves and hooves. Treatment and prevention	Surgical instruments (syringes, needles). Antiseptic solutions, solution novocaine of various concentration, tampo- us, napkins, rubber- gloves

Organization and economics of veterinary business

During the period of pre-graduation production practice, students must:

study and analyze:

- **organizational structure of the veterinary service within the administrative region;**
- **fulfillment of the requirements of veterinary legislation in the region and on the farm (at the place of practice);**
- **organization of veterinary educational work among the population and livestock workers;**
- **planning of veterinary activities (current, operational and long-term planning);**
- **financing of veterinary activities;**
- **organization of material and technical support of the veterinary service;**
- **organization of state veterinary supervision and veterinary and sanitary measures;**

- **organization of the work of the district veterinary station, city veterinary station, district veterinary clinic, interdistrict veterinary laboratory or RVS diagnostics department, laboratory of veterinary and sanitary examination, as well as veterinary service on the farm;**
- **the procedure for licensing veterinary activities;**
- **compliance with the rules of veterinary ethics;**
- **economic efficiency of the main treatment and preventive measures carried out at the place of practice.**

acquire practical skills:

- **conducting veterinary office work: accounting (journals f.1, f.2. f. 10, f. 23, etc.), reporting (12 veterinary diseases (Ministry of agriculture), 4 veterinary (Ministry of agriculture), 2 vet of disease (Ministry of agriculture);**
- **registration of accompanying documents, certificates, veterinary certificates, acts for carrying out veterinary measures (vaccination, allergic tests, disinfection, deworming, epizootological, veterinary and sanitary inspection of complexes, farms, etc.);**
- **the procedure for drawing up applications for the purchase of various groups of veterinary goods, their receipt, posting, organization of storage and write-off.**

Veterinary and sanitary examination

On the basis of the work done, the student must acquire the following practical skills in:

- **technique and methodology of veterinary and sanitary examination of carcasses and organs of slaughtered animals;**
- **methods of organoleptic, physicochemical and bacteriological analysis of meat;**
- **the technique of compressor trichinoscopy of meat;**
- **methods for determining the meat of sick animals;**
- **methods of testing products for freshness;**
- **methods of sanitary examination of eggs and honey;**
- **methods of research of milk and dairy products;**
- **methods of research of products of plant origin;**
- **research methods for freshwater and marine fish;**
- **methods of radiological examination of products of animal and vegetable origin;**
- **rules for sampling, conservation of material and sending to the diagnostic department of the district veterinary station;**
- **rules for the preparation of animals on the farm for delivery to the meat processing plant and the execution of accompanying documentation.**

Recommended scope of work: **conduct a veterinary health check if necessary - veterinary and sanitary examination) carcasses of meat of various species of animals, examine samples of milk and dairy products, fish, honey, eggs, plant products.**

Due to the fact that LVSE in different regions of the Republic of Belarus have different levels of accreditation, trainees must work out the methodology for studying those products of animal and plant origin that are supplied for sale at the place of practice.

Veterinary sanitation

After completing the internship, the student must *know:*

- **the procedure for the implementation of veterinary and sanitary measures (disinfection, disinfestation, disinfestation and deratization) aimed at sanitation (disinfection) of objects of veterinary supervision;**

be able to:

- **to determine the active substances in various chemical compounds of disinfectants;**
- **evaluate the effectiveness of disinsection, disinfestation and deratization (determination of the extensiveness and intensity of rodent colonization) at livestock facilities;**
- **carry out bacteriological quality control of disinfection; *own:***

- **methods of sanitary washing and disinfection (desinvasion) by various methods (aerosol, wet, foam) at the objects of veterinary supervision;**

- **methodology for disinfestation and deratization at veterinary supervision facilities.**

Recommended scope of work: **take an active part in the conduct of infection by the wet (aerosol, foam) method, disinfestation and preventive and extermination measures to combat rodents in livestock facilities.**

Diseases of small animals and birds

Upon completion of the internship, the student must *know:*

- **methods of diagnostics and therapy of diseases of different etiologies;**
- **technique of bacteriological, immunological, virological, serological, hematological and other studies;**
- **specific prevention of infectious diseases of dogs, cats, fur animals and rabbits, exotic and zoo animals and birds, bees and fish, biological products and methods for their use (vaccines, hyperimmune sera, gamma globulins, bacteriophages, allergens, diagnostics for serological reactions);**

be able to:

- **make a diagnosis on the basis of epizootological data, clinical signs, pathoanatomical changes and laboratory results;**

- **provide medical assistance to sick animals using specific, etiotropic, pathogenetic, symptomatic and other types of therapies;**

- **to develop and carry out veterinary measures aimed at the prevention and elimination of contagious and non-contagious diseases of small animals;**

own:

- **methodology for analyzing the epizootic situation for infectious diseases of small animals;**
- **the main methods of providing medical care to small animals.**

During the internship, students must study and master:

- **characteristics of pathogens of infectious diseases, adequate systems for the protection of the body of small animals and birds;**
- **factors of specific and nonspecific immunity, their interaction with the pathogenicity of microorganisms, features of the course of the epizootic process, pathogenesis, clinical signs, course and forms of manifestation, pathoanatomical changes in infectious and non-communicable diseases;**
- **methods of diagnostics and therapy of diseases of different etiologies;**
- **technique of bacteriological, immunological, virological, serological, hematological and other studies;**
- **specific prevention of infectious diseases of dogs, cats, fur animals and rabbits, exotic and zoo animals and birds, bees and fish, biological products and methods for their use (vaccines, hyperimmune sera, gamma globulins, bacteriophages, allergens, diagnostics for serological reactions);**

- **the direction and nature of therapeutic and preventive measures for a specific disease, the principles of protecting the environment from infection;**
- **methodology for analyzing the epizootic situation in infectious diseases of small animals and the ability to give it a professional assessment, conduct a clinical examination of dogs, cats, fur-bearing animals and rabbits, exotic and zoo animals and birds, bees and fish;**
- **drawing up an act of veterinary, sanitary and epizootological examination of a dog kennel, fur farm, poultry farm, fish nursery and bee apiary, select and send pathological material for laboratory research (bacteriological, virological, biochemical, toxicological);**

- **diagnostics of contagious and non-contagious diseases of small animals and birds;**
- **development of a plan for recreational activities in the fur farm, dog breeding kennel, poultry farm, fish farm and bee apiary for infectious diseases, write an explanatory note to the plan of recreational activities;**

- **drawing up a plan of anti-epizootic and preventive veterinary and sanitary measures for diseases of various etiologies.**

Microbiology and immunology; virology

As a result of the internship, the student must *know:*

- **theoretical foundations of the vital activity of microorganisms, their interaction with each other and with the animal organism;**
- **the doctrine of the immune system of animals, the principles of recognition of genetically alien substances and the formation of an immune response, the structure and properties of antigens;**
- **biological properties of bacteria and viruses that cause diseases in animals;**
- **methods of laboratory diagnostics of bacterial and viral infections; *be able to:***
- **receive, preserve, transport and prepare test material for bacteriological and serological diagnostics;**
- **conduct a study of pathological material in the diagnosis of infectious diseases of animals and interpret the results;**

own:

- methods of carrying out intravital and post-mortem diagnostics of bacterial and viral diseases.

Place of internship **- diagnostic department of the veterinary station. Stu-During the period of practice, the dents should familiarize themselves with the rules of work in the veterinary laboratory, its facilities and equipment. Get practical skills in conducting bacteriological and virological research. First, the students are familiarized with the safety rules, the purpose and objectives, the procedure for passing the practice, the form of maintaining the necessary documentation and the final reporting, the head of the practice is appointed from among the specialists of the diagnostic department of the district veterinary station. During the internship, students make the necessary entries in the diary about the work done.**

1. Layout and equipment of the bacteriological laboratory, rules of work and safety precautions. **Students get acquainted with the device of bacteriological laboratory and equipment of its production facilities, basic rules of work in it, available documentation, regulatory documentation for bacteriological research.**

2. ***Methods for the preparation of smear preparations from bacterial cultures and preparations rats-prints from pathological material, simple and complex staining methods.*** **Students master the methods of preparation of preparations-smears from bacteria. rial cultures and preparations-imprints from pathological material. Then they work out the coloring according to the following methods: Gram, Ziel-Nielsen, Olt, Romanovsky-Giemsa, Guins, Mikhin, Rebiger.**

3. Familiarization with the composition and technique of preparation of nutrient media. **Student- you study the composition and technique of preparation of conventional (MPB, MPA, semi-liquid agar), some special (serum agar, Zeissler agar, chocolate agar) and differential diagnostic nutrient media (Hiss semi-liquid media, Endo agar, bismuth-sulfite agar). In the future, the method of inoculation and re-inoculation of microorganisms on liquid, semi-liquid and solid nutrient media with the help of bacteriological loops, spatulas, Pasteur pipettes is being worked out. At the same time, the method of successive dilutions, the method of fractional inoculation, the method of heating, the method of enrichment and the bacteriostatic method of isolating pure cultures of aerobic and anaerobic microorganisms are mastered.**

4. Methods of infection and autopsy of laboratory animals, rules for taking and sending pathological material. **Students visit the vivarium, get acquainted with keeping and feeding laboratory animals in it, mastering the methods of their fixation, infection (i/b, i/v, s/c, i/m, cutaneous) and autopsy. They study the rules for taking and sending pathological material.**

5. Statement of RID, PA, PZGA, RP, RSK, ELISA in order to identify pathogens and detect antibodies in the studied blood sera. **Students learn the essence of reactions, get acquainted with standard diagnosticums for setting serological reactions, master the technique of setting and recording results:**

- **RGA and RZGA in the diagnosis of influenza or Newcastle disease;**
- **ELISA and RID in the diagnosis of leukemia;**
- **RP according to Ascoli in the diagnosis of anthrax;**
- **RA in the diagnosis of salmonellosis and colibacillosis;**
- **RMA in the diagnosis of leptospirosis;**
- **rose-bengal test and RSK in the diagnosis of brucellosis.**

6. Methods of laboratory diagnostics of bacterial and viral diseases. **Stu-Dentists master the methods of laboratory diagnostics of diseases:**

a) viral diseases (rabies; bovine leukemia; - rotavirus and coronavirus infection of cattle; classical swine fever; Aujeszky's disease; Newcastle disease; IRT (infectious rhinotracheitis); infectious bronchitis of chickens; parvovirus infection of pigs);

b) bacterial diseases (staphylococcosis; streptococcosis; salmonellosis; colibacteriosis; tuberculosis; hemophiliasis; pasteurellosis; emphysematous carbuncle; necrobacteriosis; anthrax; brucellosis; bordetellosis; malignant edema; listeriosis; swine erysipelas).

Veterinary Radiology

As a result of the internship, the student must *know:*

- **nature, types, origin and characteristics of radioactive emissions;**
- **dosimetric and radiometric quantities;**
- **biological effect of ionizing radiation;**
- **types of radioactive lesions of animals;**
- **radiological examination of objects of veterinary supervision;**
- **radiation safety; *be able to:***

- **use the basic principles and means of protecting the population and animals from radioactive radiation;**
- **correctly select and send material for radiological examination;**
- **measure the level of radioactive contamination of the environment and objects of veterinary supervision;**

own:

- **skills of work on dosimetric and radiometric instruments;**
- **methods for measuring radioactive contamination of environmental objects;**
- **skills of conducting radiometric and radiochemical examination of objects of veterinary control;**
- **diagnostics of radioactive lesions and assistance to animals. *Place of internship:***

radiation monitoring unit (PRK) of the Department of Laboratory Diagnostics of the State Institution (GLPU) "District Veterinary Station" or the PRK of an interdistrict (zonal) veterinary laboratory.

Students should familiarize themselves with the location, general layout, equipment and operation of the radiation monitoring unit. Acquire practical skills and abilities to measure the equivalent dose rate of gamma radiation (gamma background level), conduct a radiological examination of objects of veterinary supervision, determine the specific (volume) radioactivity of samples of objects of veterinary supervision and food products.

Task number 1. **Familiarize yourself and describe in your diary what it is radiation monitoring unit: location, composition of premises, equipment with dosimetric, radiometric and spectrometric instruments (brand of the instrument, its purpose and number of pieces), main and auxiliary equipment.**

Specify:

- **staff of employees of the radiological service (full name, position held);**
- **PRK work plan for the year and quarterly (dosimetric and radiometric studies);**

- **control agricultural organizations (control points) for the PKK in the area for planned sampling;**
- **documentation of the radiation control unit.**

***Task number 2*... Study for the previous few years and months (current year) yes) GoK reports. According to the reports, describe in the diary the radiation situation in the whole area: indicating the density of soil contamination with radionuclides ^{90}Sr and ^{137}Cs to kBq/km^2 and the value of the average level of equivalent dose rate of gamma radiation for the previous year and by months for the current year.**

***Task number 3*... Under the supervision of a radiologist, acquire practical skills in working with dosimetric instruments available in the radiation control unit. To work out the methodology and measure the equivalent dose rate of gamma radiation at the reference (control) point on the terrain (territory) where the RHC is located and in the premises of the RHC.**

In the diary, describe the process of measuring the equivalent dose rate of gamma radiation on one of the devices. Indicate the measurement results and evaluate them.

***Task number 4.* To study the frequency and scope of control of radioactive contamination contamination of agricultural products by the radiation control unit.**

Under the guidance of a radiologist, conduct a radiological examination of samples (at least 3) of feed and products of animal origin using the instrumental express method.

In the diary, indicate the name and number of the STB and the rules for sampling (if any) of a particular type of sample. List the name of the accompanying documents for the average sample, indicate their content on a specific example (one of the samples received by the RPC).

Work out the methodology and procedure for preparing average samples for radiometry. In the diary, describe the preparation process using the example of one specific sample.

Conduct sample radiometry. Indicate which radiometer (brand) was used to study the samples. Give an assessment of the results of the study of product samples, taking into account the permissible levels (RCL) of the content of the radionuclide in them ^{137}Cs.

Toxicology

As a result of the internship, the student must *know:*

- **safety and personal hygiene rules when working with pesticides and in the toxicology laboratory;**
- **properties of toxic substances and their effect on the organism of animals;**
- **rules for taking, preserving and sending biological material to diagnostic institutions for toxicological examination;**

be able to:

- **carry out diagnostics of various poisonings of animals, birds, fish and beneficial insects;**
- **to treat animals in case of poisoning, using the methods of antidote, symptomatic, pathogenetic and substitution therapy;**
- **take measures to prevent poisoning of animals, birds, fish and beneficial insects;**
- **develop measures to prevent environmental pollution with pesticides;**

own:

- **methods of sampling, packing and sending samples of biomaterial, feed and water to the laboratory;**
- **the technique of introducing drugs into the body of animals with toxicosis;**
- **technology for the neutralization of toxic substances in various biological media, feed and water.**

During the internship, the student must:

- **to get acquainted with the work of the toxicological department of the regional veterinary station;**
- **master safety and labor protection when working in the laboratory and with pesticides;**
- **study the rules for selection, packaging, delivery, acceptance and registration of biomaterial samples for chemical-toxicological analysis;**
- **study the toxicological situation in the farm (at the place of internship);**
- **get acquainted with the list of pesticides and mineral fertilizers used on the farm, study the conditions for their storage;**
- **identify and describe poisonous plants growing on the territory of the holding;**
- **work out the diagnosis of poisoning (collection of anamnestic data, analysis of the economic situation, clinical symptoms, pathoanatomical changes);**
- **in the event of poisoning, learn how to correctly and timely diagnose and provide medical assistance to the animal. Write out prescriptions for drugs used in the treatment of animal toxicosis;**
- **draw up a plan for the prevention of toxicosis for a particular household.**

INFORMATIONAL AND METHODOLOGICAL PART

The main document reflecting all the work of the trainee is a detailed diary, for which a common notebook is usually used. Its cover (or 1st page) indicates the place of the main practice, full name, course and group of the trainee (Appendix 1).

Diary form:

date	Place of work	The content and scope of bots	Notes and signature leader
one	2	3	4

The diary contains detailed information about the specific work performed. Entries in the diary are made daily, in ink, neat, legible, complete. Unaccepted word abbreviations, blots, strikethroughs are not allowed. Once a week, the diary is presented to the head of the practice for verification and signature.

In the last 2 days of practice, students prepare a report on the results of practice in the context of each discipline, indicating the practical skills and abilities acquired and consolidated during the pre-diploma internship.

The material for compiling a report (up to 20 pages) is entries in the diary. The report is compiled strictly individually on standard sheets of A4 paper. It can be illustrated with drawings, graphs, photographs. The text of the report must be handwritten, legible, literate... Pages should have margins and numbering.

The report is compiled according to the following scheme: 1.

Introduction;

2. General characteristics of the place of practice;

3. A detailed analysis of the work done in all disciplines;

4. Veterinary educational work;

5. Conclusion.

Introduction **written in 1–1.5 pages. It highlights the role of veterinary medicine and various veterinary measures in protecting the health of animals and people, in ensuring the epizootic and epidemic well-being of the republic; control over the release of benign veterinary and sanitary products of animal origin.**

General characteristics of the place of practice **(3–4 this section pages). In it is necessary to show: the location of the farm, where passed practice; its production orientation; presence of livestock of farm animals by species; animal productivity; provision of livestock industries with premises, their zoohygienic and veterinary-sanitary condition. It also shows the state of the forage base and the level of animal feeding (feed units, digestible protein, etc.), the profitability of agricultural industries and the economy as a whole, and the cost of livestock products.**

This section of the report also reflects the epizootological state of the farm over the past 2–3 years, the incidence and safety of livestock, incl. youngsters. In addition, an analysis is given of the causes of morbidity and diseases that cause the greatest economic damage to livestock farming, a description of the treatment, preventive and recreational activities carried out in

farm, the latest, advanced means, techniques, methods used by the veterinary service of the farm in the treatment and prevention of contagious and non-contagious animal diseases are shown, the staff of veterinary specialists is given.

It is also necessary to briefly describe the organization of work of the diagnostic department of the regional veterinary station, production laboratories on the farm (if any), and the laboratory of veterinary and sanitary examination in the market.

***Detailed analysis of the work done in each discipline (*13–15 pages) The section begins with summary tables of summary data on diagnostic, therapeutic and preventive work (Tables 1, 2, 3).**

Table 1 - Summary of diagnostic work

Quantity conducted research	Animal species						
	large horned livestock	pigs	horse-di	sheep and goats	bird	other types of living votnyh	Total
Tuberculosis							
Leukemia							
Brucellosis							
Leptospirosis							
salmonellosis							
colibacillosis							
pasteurellosis							
anthrax							
Trichophytosis							
Listeriosis							
Aujeszky's disease							
edematous disease							
Other infections							
Coproscopic research							
metabolic diseases entities							
Biochemical is-following							
For hidden mastitis							
Diagnostics stel-news							
Opened corpses							
Total							

Note: **the table shows the serological data reflected in the diary sky, allergic, bacteriological, virological, hematological, biochemical and other diagnostic studies conducted in the household and the diagnostic department of the district veterinary station.**

Table 2 - Summary of medical work

Diseases	Animal species						
	large horned livestock	pigs	horse-di	sheeps andgoats	bird	other species stomach-nyh	Total
respiratory and cardiovascular systems	-						
gastrointestinal and liver -							
metabolism							
urinary system							
mammary gland							
obstetric and gynecological							
other non-contagious							
surgical							
infectious							
invasive							
poisoning							
Including young animals (from the total number)							
Total							

Table 3 - Summary data on preventive or forced work (vaccinations, deworming, other treatments)

Diseases	Animal species						
	large horned livestock	vigny	horses	sheep and goats	bird	other types stomach-nyh	Togo
one	2	3	4	5	6	7	eight
VACCINATIONS: Plague and swine erysipelas							
anthrax							
Aujeszky's disease							
Rabies							
Trichophytosis							
salmonellosis							
colibacillosis							
pasteurellosis							
Leptospirosis							
Other infections							
DEHELMINTIZATION: Fascioliasis							
Dictyocaulosis							
ascariasis							
Other invasive bo-Lezni							

one	2	3	4	5	6	7	eight
PROCESSING: **Hypodermic gadfly**							
Babesiosis							
Scabies							
lice							
Stimulants							
Hormones							
Vitaminization							
Against anemia							
Other treatments							
Total							

For each section of the program (internal medicine, surgery, etc.), the trainee analyzes:

- **causes of diseases;**
- **diagnostics;**
- **methods of treatment and prevention by groups of diseases and animal species;**
- **describes the dynamics of morbidity and mortality by individual groups,**
- **gives examples of cases of disease in animals that proceeded most difficultly, atypically, or somehow especially.**

The examples given should be short and specific. When writing this section of the report, the trainee is obliged to constantly use special literature.

At the end of each section, a list of professional skills acquired in practice in the analyzed discipline is given.

Veterinary educational work **(1–2 pages). This section of the report shows the work carried out to promote veterinary knowledge among the population and livestock workers. For example, the number of lectures delivered, talks and speeches held on professional topics (specify which topics), participation in animal husbandry training of livestock workers (on which topics). Whether participation in vocational guidance of local youth was taken and its result. Other forms of veterinary educational work.**

Conclusion. **The conclusion describes the positive aspects and disadvantages statistics of practice for individual sections of the program, negative aspects in the treatment and prevention of animal diseases are noted, criticisms and proposals for improving the work of the veterinary service of the region and the farm are indicated. The reasons for non-fulfillment of the program in individual disciplines are analyzed.**

At the end of the report, the trainee's signature and the date of its compilation are put.

Obstetrics, gynecology and biotechnology of animal reproduction

When compiling a report, it is necessary to conduct a brief analysis of the state of reproduction of productive animals, indicating specific indicators achieved on the farm. To establish the causes of occurrence, mass lesions, economic losses, methods of treatment and prevention of obstetric and gynecological diseases.

Pathological anatomy, autopsy and forensics

The report should contain a brief description of the organization of the pathoanatomical work of the veterinary service of the district veterinary station and the farm. Analyze the causes of death of animals on the farm. As an appendix, the report should contain a protocol of post-mortem autopsy of the 1st animal.

General and private surgery, ophthalmology

The report should include a list of work performed in general, private surgery, orthopedics and ophthalmology. It is necessary to give an analysis of one or another pathology, which includes: the causes of occurrence, the mass nature of the lesion, how the pathogenesis develops, economic losses, methods of treatment and prevention.

Organization and economics of veterinary business

When preparing reporting documentation, students attach copies of acts, inventories, cover letters, veterinary certificates, veterinary certificates (Appendix 4) in the annex.

Veterinary and sanitary examination

Records of the conducted product research in the diary must be indicated according to the following scheme:

- **the type and quantity of the product received for the study;**
- **where and by whom the product was delivered;**
- **what supporting documents are submitted for examination;**
- **in what container the product is delivered;**
- **how many samples were taken from the batch of the investigated product;**
- **organoleptic examination of the product (method, result);**
- **physical and chemical study of the product (method, result);**
- **conclusion on the suitability of the product for food purposes (in which journal the research results are registered, veterinary sanitary examination coupon).**

When preparing a report in the relevant section, it is necessary to present the results of the research in the form of a table and analyze it.

No. P/P	Name-pro-induction	Quantity stvo pro-duction, subjected to well-trace-nyu	Analysis results		Conclusion			
			organo-lep-tic-th	physical chemical sky	Released without restrictions	Sent to the promoterbotku	confiscated and sentfordisposal	Not allowed for sale andreturnedtotheowner

Veterinary sanitation

The diary should describe:

- **disinfection technique, product name, consumption, temperature and concentration of the disinfectant in the working solution, exposure after treatment;**
- **methods for determining the active substances in disinfectants used at a given enterprise;**
- **methods of carrying out disinsection (aerosol, wet, dry with the use of dusts) and preventive and extermination measures to combat rodents (mousetraps and rattraps, ultrasonic repellers, poisoned baits, rodenticides, etc.) of livestock facilities;**
- **the results of disinfestation (for example, complete or partial extermination of insects in the processed room) and deratization (visual assessment of the degree of rodent colonization of the territory of the livestock facility before and after the deratization).**

The report should contain a detailed description of all the acquired skills for the sanitation of veterinary supervision facilities (in accordance with the thematic plan for the practice of veterinary sanitation), reflect the scope of work performed, describe the degree of provision of the veterinary service of this enterprise with equipment for sanitary work, disinfectants , insecticides and rodenticides.

Veterinary Radiology

When making a diary, students must reflect cases of exceeding the permissible levels (if any) of radionuclides in the area ^{90}Sr and ^{137}Cs in samples of objects of veterinary supervision based on the results of the study of products by the radiological service for the previous and current years.

Based on the results of the practice, students must make appropriate entries in the diary, taking into account the proposed 4 tasks.

In the report, briefly describe the radiation situation in the whole region and the amount of work performed in the discipline in the context of the practice program. Indicate the positive and negative aspects of its passage.

BASIC AND FURTHER READING LIST: Obstetrics, gynecology and biotechnology of animal reproduction

one. Kuzmich, R. G. Clinical obstetrics and gynecology of animals: textbook for students of agricultural universities / R. G. Kuzmich. - Vitebsk, 2002. - 313 p. 2. Medvedev, G. F. Obstetrics, gynecology and biotechnology of reproduction of farm animals: workshop: textbook for university students in the specialties "Veterinary medicine", "Zootechny" / G. F. Medvedev, K. D. Valyushkin . - Minsk: Belarus, 2010. - 456 p.

Pathological anatomy, autopsy and forensics

1. Belkin, B. L. Pathological diagnostics of animal diseases (based on autopsy and forensic veterinary examination by you): a textbook in the direction of preparation "Veterinary" / B. L. Belkin, V. S. Prudnikov; Orel State Agrarian University. - 2nd ed., add. - Eagle: OrelGAU, 2012. - 388 p.

2. Zharov, A. V. Autopsy and pathomorphological diagnosis of animal diseases : a textbook for university students in the specialty "Veterinary" / A. V. Zharov, I. V. Ivanov, A. P. Strelnikov; ed. A. V. Zharov. - Moscow: KolosS, 2003. - 400 p.

3. Course of lectures on the subject "General pathological anatomy": educational methodical manual / V. S. Prudnikov [and others]; Vitebsk State Academy of Veterinary Medicine, Department of Pathological Anatomy and Histology. - Vitebsk: VGAVM, 2011. - 112 p.

4. A course of lectures on private pathological anatomy. Part 1. Non-contagious diseases and bacterial etiology: teaching aid / V. S. Prudnikov [and others]; Vitebsk State Academy of Veterinary Medicine, Department of Pathological Anatomy and Histology. - Vitebsk: VGAVM, 2012. - 92 p.

5. A course of lectures on private pathological anatomy. Part 2. Diseases of the viral and parasitic etiology, mycosis and mycotoxicosis: teaching aid / V. S. Prudnikov [and others]; Vitebsk State Academy of Veterinary Medicine, Department of Pathological Anatomy and Histology. - Vitebsk: VGAVM, 2013. - 100 p.

6. Macro- and microscopic changes in organs and tissues of animals with typical in pathological processes: a teaching aid for students in the specialty "Veterinary Medicine" and students of the FPC and PC / V. S. Prudnikov [and others]; Vitebsk State Academy of Veterinary Medicine, Department of Pathological Anatomy and Histology. - Vitebsk: VGAVM, 2011. - 30 p.

7. Pathological anatomy of farm animals: a textbook for stu-university dentists in the specialty "Veterinary" / A. V. Zharov [and others]; Ed.: V. P. Shishkov, A. V. Zharov. - 4th ed. revised and add. - Moscow: KolosS, 2003. - 568 p.

8. Pathological anatomy of farm animals: workshop: textbook a manual for students of higher agricultural educational institutions in the specialty "Veterinary Medicine" / VS Prudnikov [and others]; ed. V. S. PRUDNIKOV - Minsk: Information Center of the Ministry of Finance, 2010. - 351 p.

9. Prudnikov, V. S. Pathological anatomy of animals: a textbook for students of institutions of higher education in the specialty "Veterinary Medicine" / V. S. Prudnikov, B. L. Belkin, A. I. Zhukov. - Minsk: Information Center of the Ministry of Finance, 2012. - 480 p.

10. Pathological anatomy, autopsy and forensic examination: educational methodological manual for the implementation of term papers by students of the faculty of veterinary medicine / V. S. Prudnikov [and others]; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: UO VGAVM, 2008. - 28 p.

Epizootology and infectious diseases

1. Androsik, N. N. Infectious diseases of horses: monograph / N. N. Androsik, A. Yu. Finogenov; ed. E. A. Kazachek. - Minsk: Tekhnoperspektiva, 2009. - 258 p.

2. Animal diseases (with the basics of pathoanatomical diagnostics and forensic veterinary expertise) / V. S. Prudnikov [and others]; ed. V. S. PRUDNIKOV - Minsk: Tekhnoperspektiva, 2010. - 507 p.

3. Diseases of sheep and goats: a practical guide / A. I. Yatusevich [and others]; ed. A. I. Yatu-Sevich, R. G. Kuzmich; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2013. - 520 p.

4. Growing and diseases of young animals: a practical guide / ed. A. I. Yatusevich [and etc.] ; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2012. - 816 p.

5. Differential diagnosis of animal diseases: a practical guide / A. I. Yatusevich [i dr.]. - Minsk: Tekhnoperspektiva, 2010. - 449 p. : tab.

6. Infectious diseases common to animals and humans: a reference guide / A.I. Yatusevich [and others]; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2011. - 480 p.

7. Zelyutkov, Yu. G. Infectious enteritis of newborn calves: monograph / Yu. G. Zelyutkov. - Vitebsk: UO VGAVM, 2006. - 188 p.

8. Infectious diseases of animals / BF Bessarabov [et al.]; ed. A. A. Sidorchuk. - Moscow: KolosS, 2007. - 671 p.

10. Maksimovich, V. V. Infectious diseases of pigs: monograph / V. V. Maximovich; Vitebsk State Academy of Veterinary Medicine. - 2nd ed., revised. and add. - Vitebsk: VGAVM, 2011. - 340 p.

Parasitology and invasive diseases

1. Parasitology and parasitic animal diseases: a textbook for university students, students in the specialty "Veterinary" / M. Sh. Akbaev [and others]; ed. M. Sh. Akbaev. - 3rd ed., Rev. and add. - Moscow: KolosS, 2008. - 776 p.

2. Parasitology and parasitic diseases of animals. Workshop : study guide for university students in the specialties “Veterinary medicine”, “Veterinary sanitation and expertise” / A. I. Yatusevich [and others]; ed. A. I. Yatusevich. - Minsk: IVTs of the Ministry of Finance, 2011. - 312 p.

3. Yatusevich, A. I. Parasitology and parasitic animal diseases: a textbook for university students majoring in Veterinary Medicine / A. I. Yatusevich, N. F. Karasev, M. V. Yakubovsky; ed. A. I. Yatusevich. - 2nd ed., add. and revised - Minsk: Information Center of the Ministry of Finance, 2007. - 580 p.

4. Arachnoentomoses of domestic ruminants and one-hoofed animals: monograph / A. I. Yatucevich [i dr.]. - Vitebsk: VGAVM, 2006. - 213 p.

5. Guide to veterinary parasitology / Al Yatusevich [and others]; ed. : V.F. Galat, A. I. Yatusevich. - Minsk: Tekhnoperspektiva, 2007. - 481 p.

6. Guide to veterinary parasitology / Al Yatusevich [and others]; Ed.: V. F. Galat, A. I. Yatusevich; Vitebsk State Academy of Veterinary Medicine, National University of Bioresources and Nature Management of Ukraine. - Minsk: Information Center of the Ministry of Finance, 2015. - 494 p.

7. Handbook of breeding and diseases of horses / A. I. Yatusevich [and others]; ed. A. I. Yatusevich. - Moscow: Real-A, 2002. - 320 p.

8. Reference book of the doctor of veterinary medicine / S. S. Abramov [and others]; ed. A.I. Yatusevich. - Minsk: Tekhnoperspektiva, 2007. - 971 p.

9. Theoretical and practical provision of high productivity of cows: practical guide. Part 1. Technological support for high productivity of cows / A. I. Yatusevich [and others]; ed. A. I. Yatusevich [i dr.]. - Vitebsk: VGAVM, 2015. - 530 p.

Internal diseases of animals

1. Abramov, S. S. Guide to veterinary endocrinology: educational methodical manual for students of the faculty of veterinary medicine / S. S. Abramov, I. S. Shevchenko; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: UO VGAVM, 2006. - 59 p.

2. Internal diseases of animals: a textbook for students of institutions of higher th education in the specialty "Veterinary Medicine": in 2 hours, Part 1 / S. S. Abramov [and others]; ed. S. S. Abramov. - Minsk: Information Center of the Ministry of Finance, 2013. - 536 p.

3. Internal diseases of animals: a textbook for students of institutions of higher th education in the specialty "Veterinary Medicine": in 2 hours, Part 2 / S. S. Abramov [and others]; ed. S. S. Abramov. - Minsk: Information Center of the Ministry of Finance, 2013. - 591 p.

4. Internal diseases of animals: a textbook for students of higher agricultural education institutions studying in the specialty "Veterinary Medicine": a textbook for students of institutions of higher education in the specialty "Veterinary Medicine": a textbook for students of the specialties "Veterinary Sanitation" and "Veterinary Medicine" / G. G. Shcherbakov [and others]; ed. G. G. Shcherbakov [i dr.]. - Saint Petersburg ; Moscow ; Krasnodar: Lan, 2014. - 712 p.

5. Internal non-communicable animal diseases: workshop: textbook for stu- students of higher agricultural educational institutions in the specialty "Veterinary medicine" / I. M. Karput [and others]; ed. I. M. Karput, A. P. Kurdeko, S. S. Abramov. - Minsk: Information Center of the Ministry of Finance, 2010. - 464 p.

6. Kondrakhin, I.P. Diagnosis and therapy of internal diseases of animals / I.P. Kondrakhin, V. I. Levchenko. - Moscow: Aquarium-Print, 2005. - 830 p.

7. Guidelines for testing, prevention and treatment of stress in industrial animal husbandry: guidelines / Ministry of Agriculture and Food of the Republic of Belarus, Department of Veterinary and Food Supervision; comp. F. I. Furdui [i dr.]. - Minsk, 2012. - 20 p.

8. Breeding and diseases of pigs: a practical guide: in 2 hours, Part II / A. I. Yatusevich [and others] ; editors: A. I. Yatusevich, S. S. Abramov, V. V. Maksimovich; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2013. - 606 p.

9. Theoretical and practical provision of high productivity of cows: practical textbook: in 2 hours. Part 2. Prevention of diseases of young cattle and cows / A. I. Yatusevich [et al.]; ed. A. I. Yatusevich [and others]; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2015. - 532 p.

General and private surgery, orthopedics

1. Clinical surgery in veterinary medicine: textbook for students higher educational institutions in the specialty "Veterinary Medicine" / E. I. Veremey [and others]; ed. E. I. Veremey, A. A. Stekolnikov. - Minsk: Information Center of the Ministry of Finance, 2010. - 600 p.

2. Lebedev, A. V. Veterinary ophthalmology: a textbook for university students in the specialty "Veterinary" / A. V. Lebedev, V. A. Chervanev, L. P. Troyanovskaya. - Moscow: KolosS, 2004. - 207 p.

3. General surgery of veterinary medicine: textbook for universities / E. I. Veremei [and others]; ed. E. I. Veremey, V. A. Lukyanovsky. - Minsk: Urajay, 2000. - 526 p.

4. Private veterinary surgery: a textbook for university students in the specialty "Veterinary" / B. S. Semenov [and others]; ed. B. S. Semenov, A. V. Lebedev. - 2nd ed. - Moscow: KolosS, 2003. - 496 p.

5. General surgery of veterinary medicine: a textbook for university students, teaching students in the specialty "Veterinary" / E. I. Veremey [and others]; Ed.: A. A. Stekolnikov, E. I. Veremey. - St. Petersburg: KVADRO, 2012. - 599 p.

6. Veremey, E. I. Little-studied surgical diseases of animals: practical allowance / E. I. Veremey. - Minsk: Tekhnoperspektiva, 2008. - 176 p.

7. Veremey, E. I. Novocaine blockades in clinical veterinary medicine / E. I. Veremey, V. M. Lakisov, V. A. Khodas; ed. E. I. Veremey. - Minsk: Technoprint, 2003. - 99 p.

8. Veremey, E. I. Recommendations for the complex treatment of cattle with papillomatosis: approved. GUV of the Ministry of Agriculture of the Republic of Belarus December 19, 2005 / E. I. Veremey, V. A. Komarovsky; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: UO VGAVM, 2006. - 14 p.

9. Veremey, E. I. Technological requirements of veterinary care, treatment cattle and prevention of surgical pathology in dairy complexes

sugar: recommendations / E. I. Veremey, V. M. Rukol, V. A. Zhurba; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2011. - 26 p.

10. Pathogenetic therapy in clinical veterinary medicine: practical allowance / E. I. Veremey [and others]; ed. E. I. Veremey. - Minsk: Tekhnoperspektiva, 2010. - 164 p.

Organization and economics of veterinary business

1. Bezborodkin, N. S. Organization and economics of veterinary business: textbook for university students majoring in Veterinary Medicine / N. S. Bezborodkin, V. A. Mashero. - Minsk: Information Center of the Ministry of Finance, 2006. - 311 p.

2. Bezborodkin, N. S. Organization and economics of veterinary business: textbook for students of secondary specialized educational institutions / N. S. Bezborodkin. - Mozyr: "White Wind", 2000. - 160 p.

3. Veterinary legislation of the Republic of Belarus: a collection of normative legal documents on veterinary medicine: in 4 vols. Vol. I / Main Department of Veterinary Medicine with the State Veterinary and State Food Inspectorates; ed. A. M. Aksenov [i dr.]. - Minsk, 2006. - 488 p.

4. Veterinary legislation of the Republic of Belarus: a collection of normative legal documents on veterinary medicine: in 4 vols. Vol. II / Main Department of Veterinary Medicine with the State Veterinary and State Food Inspectorates; ed. A. M. Aksenov [i dr.]. - Minsk: Main Department of Veterinary Medicine, 2008. - 624 p.

5. Veterinary legislation of the Republic of Belarus: a collection of normative legal documents on veterinary medicine: in 4 vols. Vol. III / Main Department of Veterinary Medicine with the State Veterinary and State Food Inspectorates; Ed.: Yu. A. Pivovarchik, A. I. Yatusevich, A. A. Rusinovich. - Minsk: Main Department of Veterinary Medicine, 2010. - 808 p.

6. Nikitin, I. N. Organization and economics of veterinary business: a textbook for students comrades of universities in the specialty "Veterinary" / I. N. Nikitin, V. A. Apalkin; International association "Agro education". – 5th ed., revised. and add. - Moscow : KolosS, 2006. - 368 p.

7. Organization and economics of veterinary business: workshop: textbook for students university dentists in the specialty "Veterinary Medicine" / V. V. Maksimovich [et al.]. - Minsk: Information Center of the Ministry of Finance, 2007. - 192 p.

8. Yatusevich, A. I. Economics and organization of veterinary medicine: (practical allowance) / A. I. Yatusevich, N. S. Bezborodkin, V. V. Maksimovich. - Vitebsk: UO VGAVM, 2006. - 303 p.

Veterinary and sanitary examination

1. Borovkov, M. F. Veterinary and sanitary examination with the basics of technology and darting of livestock products: a textbook for university students studying in the specialty "Veterinary" / M. F. Borovkov, V. P. Frolov, S. A. Serko; ed. M. F. Borovkov. - Saint Petersburg ; Moscow ; Krasnodar: Lan, 2007. - 448 p.

2. Veterinary and sanitary examination with the basics of meat and fish products technology comrade: reference manual / V. M. Lemesh [and others]; ed. V. M. Lemesh. - Vitebsk, 2004. - 322 p.

3. Collection of technical regulatory legal acts on veterinary and sanitary examination of animal products / ed. E. A. Pankovets. - Minsk: Diesel-91, 2008. - 303 p.

Veterinary sanitation

1. Veterinary and sanitary rules for dairy farms of agricultural organizations, personal subsidiary and peasant (farm) farms for the production of milk: approved. by the decision of the Ministry of Agriculture and the Republic of Belarus on March 17, 2005. №16 / comp. V.M. Lemesh. - Vitebsk: VGAVM, 2005. -26 p.

2. Veterinary and sanitary rules for the fight against trichinosis in animals in the Republic ke Belarus / A. M. Aksenov [and others]; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: UO VGAVM, 2007. - 13 p.

3. Veterinary and sanitary rules for washing and disinfection of technological equipment production and production facilities for organizations engaged in the slaughter of farm animals and meat processing / A. M. Aksenov [et al.]; National Academy of Sciences of Belarus, Ministry of Agriculture and Food of the Republic of Belarus, Republican Unitary Enterprise "Institute of Meat and Dairy Industry". - Minsk, 2007. - 123 p.

4. Veterinary and sanitary rules for veterinary disinfection. Me-
Todic guidelines for quality control of disinfection and sanitation of objects subject to veterinary and sanitary supervision / A. M. Aksenov [and others]; Ministry of Agriculture and Food of the Republic of Belarus, National Academy of Sciences of Belarus, RUE "Institute of Experimental Veterinary Medicine named after S. N. Vyshelessky". - Minsk, 2007. - 96 p.

Diseases of small animals and birds

1. Diseases of small animals and birds: a textbook for students of institutions, re-alizing educational programs of secondary specialized education in the specialty "Veterinary Medicine" / V. A. Gerasimchik [et al.]. - Minsk: RIPO, 2012. - 159 p.

2. Gerasimchik, V. A. Diseases of small animals and birds of non-contagious etiology: textbook but-methodical manual for students majoring in "Veterinary Medicine" and students of the FPCiPK / V. A. Gerasimchik, M. F. Nikolaenko, O. Yu. Zybina; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2016. - 138 p.

3. Growing and diseases of birds: a practical guide / A. I. Yatusevich [and others]; editors: A. I. Yatusevich, V. A. Gerasimchik; Vitebsk State Academy of Veterinary Medicine. - Vitebsk: VGAVM, 2016. - 536 p.

4. Sozinov, V. A. Modern drugs for the treatment of dogs and cats: [reference] / V. A. Sozinov, S. A. Ermolina. - Moscow: Aquarium-Print, 2004. - 496 p.

5. Poultry with the basics of anatomy and physiology: a textbook for students institutions of higher education in the specialties "Veterinary medicine", "Zootechnics" / A. I. Yatusevich [and others]; Ed.: A. I. Yatusevich, V. A. Gerasimchik. - Minsk: Information Center of the Ministry of Finance, 2016. - 312 p.

Microbiology and immunology; virology

1. Virology. Workshop: textbook for students of institutions of higher education education in the specialty "Veterinary Medicine" / R. B. Korochkin [and others]; ed. R. B. Korochkin. - Minsk: Information Center of the Ministry of Finance, 2013. - 256 p.

2. Immunology: textbook for university students of biological specialties / P. A. Krasochko [and others]; editors: P. A. Krasochko, N. D. Lisova. - Minsk: Aversev, 2005. - 128 p.

3. Microbiology and immunology: for students of agricultural universities in special sociality "Veterinary medicine", "Zootechny": in 2 hours. Part 1. General microbiology and immunology / A. A. Soloneko [and others]; Ed.: A. A. Glaskovich, P. A. Krasochko. - Minsk: Pion, 2002. - 248 p.

4. Workshop on general microbiology: a textbook for university students in special sociality "Veterinary Medicine" / A. A. Soloneko [and others]. - Minsk: Urajay, 2000. - 280 p.

5. Workshop on private microbiology: a textbook for students of agricultural economic universities in the specialty "Veterinary Medicine" / A. A. Soloneko [and others]; ed. A. A. Glaskovich. - Minsk: Urajay, 2000. - 250 p.

6. Kislenko, V. N. Veterinary microbiology and immunology: a textbook for students of universities studying in the specialty "Veterinary". Part 1. General microbiology / V. N. Kislenko, N. M. Kolychev; ed. E. V. Yarnykh; International Association "Agricultural Education". - Moscow: KolosS, 2006. -183 p.

7. Kislenko, V. N. Veterinary microbiology and immunology: a textbook for students of universities studying in the specialty "Veterinary". Part 3. Private microbiology / V. N. Kislenko, N. M. Kolychev, O. S. Suvorina; ed. E. V. Yarnykh; International Association "Agricultural Education". - Moscow: KolosS, 2007. - 215 p.

8. Kolychev, N. M. Veterinary microbiology and immunology: a textbook for students comrade of universities in the specialty "Veterinary" / N. M. Kolychev, R. G. Gosmanov; ed. T. S. Molochaeva. - 3rd ed., Rev. and add. - Moscow: KolosS, 2006. - 432 p.

9. Tuzova-Yuskovets, R. V. Classical and modern immunology / R. V. Tuzova-Yuskovets, N. A. Kovalev; National Academy of Sciences of Belarus. - Minsk: Belarusian Science, 2006. - 691 p.

10. Pavlovich, S. A. Microbiology with virology and immunology: teaching aid bee for students of medical universities / S. A. Pavlovich. - Minsk: Higher School, 2005. – 799 p.

11. Handbook of bacteriological research methods in veterinary medicine / comp. A. E. Vysotsky, Z. N. Baranovskaya. - Minsk: Beltamozhservice, 2008. - 824 p.

Veterinary Radiology

1. Klimenkov, K. P. Dosimetry of ionizing radiation: a teaching aid for students in the specialties "Veterinary Medicine", "Zootechny", students of the FPC and retraining of personnel, veterinary specialists of radiation control units / K. P. Klimenkov, V. P. Gurin. - Vitebsk: UO VGAVM, 2007. - 25 p.

2. Methods for measuring the activity of radionuclides: a teaching aid for students in the specialty "Veterinary Medicine" / E. L. Bratushkina [and others]; Vitebsk State Academy of Veterinary Medicine, Department of Radiology and Biophysics. - Vitebsk: VGAVM, 2015. - 29 p.

4. Radiological examination of objects of veterinary supervision: teaching aid / comp. K. P. Klimenkov [i dr.]. - Vitebsk, 2000. - 56 p.

Toxicology

Main literature:

1. Tolkach, N. G. Veterinary toxicology: a textbook for students of of higher education in the specialty "Veterinary Medicine" / N. G. Tolkach, V. V. Petrov, M. P. Kuchinsky; ed. N. G. Tolkach. - Minsk: Information Center of the Ministry of Finance, 2014. - 469 p.

2. Zhulenko, V. N. Veterinary toxicology: a textbook for university students in special sociality "Veterinary" / V. N. Zhulenko, M. I. Rabinovich, G. A. Talanov; ed. V. N. Zhulenko. - Moscow: Kolos, 2001. - 384 p.

3. Educational and methodological manual for conducting laboratory and practical classes on veterinary toxicology: for students of the faculty of veterinary medicine / N. G. Tolkach [and others]; Vitebsk State Academy of Veterinary Medicine. – Vitebsk, 2003. – 50 s.

4. Limarenko, A. A. Feed poisoning of farm animals: educational manual for students of higher educational institutions studying in the specialties "Veterinary" and "Animal husbandry" / A. A. Limarenko, G. M. Bazhov, A. I. Baranikov. - Saint Petersburg ; Moscow ; Krasnodar: Lan, 2007. - 383 p.

5. Arestov, I. G. Veterinary toxicology: a textbook for students of agricultural of higher educational institutions in the specialty "Veterinary Medicine" / I. G. Arestov. - Minsk: Urajay, 2000. - 343 p.

6. Kaplin, V. G. Fundamentals of ecotoxicology: a textbook for students of higher educational institutions studying in the specialties "Agroecology" and "Plant Protection" / V. G. Kaplin; ed. I. A. Frolova; International Association "Agriculture". - Moscow: KolosS, 2006. - 232 p.

ANNEX 1

MINISTRY OF AGRICULTURE AND FOOD OF THE REPUBLIC OF BELARUS

Educational Establishment "Vitebsk Order of the Badge of Honor" state academy of veterinary medicine"

REPORTING DOCUMENTATION
on production undergraduate practice

student of the 3rd year of NISPO of the 1st group of the faculty of veterinary medicine

Ivanov Ivan Ivanovich

Place of internship: SPK "Olgovskoye" of Vitebsk region;
diagnostic department of GLPU "Vitebsk regional veterinary station";
laboratory of veterinary and sanitary examination.

Admitted to the defense "_____" _____ 2016
The defense took place "_____" _____ 2016
Grade _____

Vitebsk 2016

APPENDIX 2

MINISTRY OF AGRICULTURE AND FOOD OF THE REPUBLIC OF BELARUS

Educational Establishment "Vitebsk Order of the Badge of Honor" state academy of veterinary medicine"

DIARY

on production undergraduate practice

student of the 3rd year of NISPO of the 1st group of the faculty of veterinary medicine

Ivanov Ivan Ivanovich

Place of internship: SPK "Olgovskoye" of Vitebsk region;
diagnostic department of GLPU "Vitebsk regional veterinary station";
laboratory of veterinary and sanitary examination

Vitebsk 2016

APPENDIX 3

MINISTRY OF AGRICULTURE AND FOOD OF THE REPUBLIC OF BELARUS

Educational Establishment "Vitebsk Order of the Badge of Honor" state academy of veterinary medicine"

REPORT

on production undergraduate practice

student of the 3rd year of NISPO of the 1st group of the faculty of veterinary medicine

Ivanov Ivan Ivanovich

Place of internship: SPK "Olgovskoye" of Vitebsk region;
diagnostic department of GLPU "Vitebsk regional veterinary station";
laboratory of veterinary and sanitary examination.

Vitebsk 2016

APPENDIX 4

ACT

"__" _____ 201 ___

This act is drawn up in the fact that I (we) _____

_____

position, full name veterinarians

in the presence_____

FULL NAME. farm representatives

_____

conducted a study on tuberculosis of cattle belonging to

_____

household, farm, town, district

_____

_____ heads were examined, incl. cows _____ heads, heifers and heifers _____ heads, calves older than 2 months _____ heads.

The studies were carried out by the intradermal method with purified PPD tuberculin, manufactured by _____ biofactory _____

date of manufacture

expiration date _____, series _____, control _____.

Tuberculin was administered _____ in the area of the middle third of the neck _____

when and with what

at a dose of 0.2 ml. The hair at the tuberculin injection site was cut off, the skin was disinfected with 70° ethanol.

Accounting for the reaction to tuberculin was carried out 72 hours after its administration, i.e. "____" _____ 201 __.

Research results:_____

no responding animals were found,

_____

responding animals identified, no.

Consumed: tuberculin _____ doses, alcohol _____ g, cotton wool _____ g.

Applications: inventory of the studied animals on _____ sheets.
The act is drawn up in _____ copies.

Signatures:

_____

_____

_____

Annex to the act dated
"___" _____ 201 _

DESCRIPTION

_____

animal species, farm, farm, district

subjected to tuberculinization "____" _____ 201 _

No. p / p	Nickname or indie view. animal number	Age	Skin fold thickness		The result is following
			before the introduction	after 72 hours	

Veterinarian_____

signature, surname, initials

ACT

"___" _____ 201_

This act is drawn up in that by me (we) _____

_____

position, full name veterinarians

in the presence_____

FULL NAME. farm representatives

_____ vaccination was carried out today _____

preventive, forced **number, type of animals, age, group**

_____ owned by _____

_____ against _____

household, farm, town, district

_____ heads were not vaccinated due to _____

_____

indicate the reason and when they will be vaccinated

Vaccination was carried out with the vaccine _____

vaccine name

_____,

against what disease

manufactured by _____ biofactory _____

date of manufacture

series _____, control _____, expiration date _____.

The vaccine was administered _____ initially "___" _____ this year.

place and route of administration

at a dose of _____ ml, again at a dose of _____ ml.
The injection site was disinfected by _____. In doing so, the following has been consumed:

indicate what

vaccines _____ ml, disinfectant _____ ml, cotton wool _____ g.

The remainder of the vaccine in the amount of _____ ml was neutralized by boiling for _____ minutes.

Offers:_____

maintenance, feeding, operation, etc.

_____

_____

The act is drawn up in _____ copies.

Signatures:

_____

_____

_____

ACT

from "___" _____ 201_

This act is drawn up in the fact that I _____
position, full name veterinarian

in the presence_____
FULL NAME. farm representatives

_____ carried

out by _____
vitaminization, treatment with sodium selenite, etc.

number and type of animals, age

owned by _____
household, farm, town, district

Processing was carried out by _____
name of the drug or prescription, method of application

_____

at a dose of _____
(per head or per 1 kg of live weight)

At the same time, _____ was spent

Instructions _____

_____

The act is drawn up in _____ copies.

Signatures:

ACT

from "___" _____ 201_

_____

farm name

This act is drawn up in the fact that I _____

position, full name veterinarian

_____

carrying out disinfection, disinsection, deratization

in the presence_____

FULL NAME. farm representatives

_____

for the period from _____ **to** _____ **201 _ carried out** _____

_____

preventive, current or final disinfection (disinfestation, deratization)

about trouble on

_____

indicate an infectious disease

premises _____

what and how many m2 of premises area processed

the territory around the premises _____**, sump** _____

how many m2 of area capacity m3

care items _____

what, how many

Disinfection (disinfestation, deratization) carried out _____

_____

indicate what method and means

With the following mode:
concentration disinfectant substances _____
air temperature in the room _____ **temperature**
disinfectant solution _____
solution consumption per 1 m_2 area (aerosol per 1 m_3)_____

After disinfection, the room was left closed for _____ **hours.**
After airing the feeder room, the partitions are washed with water.
Total processed: premises _____ **m_2 (m_3)**
walking _____ **m_2**
territory_____ **m_2**
care items _____ **pcs;**
sludge collectors _____ **m_3**
Total spent _____

what and how many initial funds

Manure_____

indicate what has been done

To control the quality of disinfection, samples were taken and sent to

_____

name of the diagnostic institution

The act is drawn up in _____ **copies**

Signatures: _____

V_____

name of the diagnostic institution (diagnostic department of the RVS, regional veterinary laboratory, Belgosvettsentr)

The address: _____

TRANSMITTAL LETTER

At the same time, it is sent for _____ **research**

type of study

pathological material

_____

list what pathological material, method of preservation

_____

_____

from _____ **owned by** _____

type and age of the animal

_____

name of the farm, farm, full name owner

Date of illness of the animal

_____ **Date of death of the animal** _____ **Clinical picture**

Postmortem data_____

_____

_____

_____

Presumptive diagnosis_____

Material selection date_____

Material selected

_____ _____ _____

(Position) **(Signature)** **(FULL NAME.)**

Material sent

_____ _____ _____

(Position) **(Signature)** **(FULL NAME.)**

MARK OF THE DIAGNOSTIC INSTITUTION: Goods receipt date_____ Samples delivered _____
Samples rejected _____ B
_____
name of the diagnostic institution

The address:_____

TRANSMITTAL LETTER

At the same time, _____ blood (serum) samples are sent from _____
species, group of animals

owned _____
farm, household, town, district

for _____ research on _____
type of research **what disease**

Household, farm _____
good, unfavorable for what diseases,
_____
if animals are vaccinated, indicate the vaccine and the date of vaccination

The study is carried out initially, repeatedly (underline).
Date and result of the previous study _____
Date of blood sampling _____

Description of animals from which blood was taken for research:

No. p / p	Inventory No. or nickname	Age	Research result				
			RBP	RA		RSK	
			pos. doubts. negative	pos. doubts. negative	titer	pos. doubts. negative	titer

The veterinarian who sent the samples **Veterinarian-diagnostician who performed research**

_____ _____

STAMP
veterinary institution "____" **Form No. 4**
_____ 201 _, No.
_____

V E T E RINARY REFERENCE
№_____

Issued (to whom)

_____
owner of the animal, products, raw materials, address of the owner

_____
_____ **that**

belonging to him _____
type of animal, products, raw materials

in the amount of _____ **subjected to veterinary examination**
heads, weight, places

_____**, diagnostic studies** _____

_____
what research, when, result

vaccinations _____
against what diseases, date

processing _____
against what diseases, date

recognized by _____ **coming out of** _____
farm, town

not located in the quarantine or endangered zone for contagious animal diseases and are sent to _____

_____
destination, slaughter, sale, etc.

The certificate is valid (only in the original) according to "____" _____ 201 _

Veterinarian _____
signature, full title of position, surname and initials

M.P.

STAMP
veterinary institution "____" **Form No. 4a**
_____ 201 _, No.
_____

V E T E RINARY REFERENCE
№_____

Issued by _____
name of the farm, subsidiary farm, farm, address

_____

in that it sends to _____
name of the dairy company

_____

milk _____ **obtained from clinically healthy cows**
raw, pasteurized, boiled

on the farm _____
name of the farm, complex, surname of the farmer

free from infectious diseases

_____

_____

The certificate is valid for 1 month from the date of issue.

Veterinarian _____
signature, full title of position, surname, initials

M.P.

Form No. 1

CUSTOMS UNION

_____

(name of the authorized body

_____

in the field of veterinary medicine of a member country of the Customs Union

VETERINARY CERTIFICATE*

BY Series No. __ - _____ from "__" _____ 20__

I, the undersigned, have issued this Veterinary Certificate

_____

(to whom - the name of the legal entity or the full name of the individual)

_____ **in that**

during the veterinary examination of the items to be sent _____

_____

(indicate the type of animals, biological objects)

in the number of _____ **heads (places, units) sick and suspected of being infected with contagious diseases were not found and they are leaving (exported) from** _____

(indicate the name of the sending organization, full address,

_____

incl. the name of the point, street and house number, district, region,

_____

region, autonomous entity or republic within the Customs Union)

safe for especially dangerous and quarantine animal diseases. When sending, indicate the well-being of the farm and the locality in accordance with the Unified veterinary (veterinary and sanitary) requirements of the Customs Union and the period of their well-being (months, years) ___

Animals were in the territory of the Customs Union: from birth, at least 6 months (underline as appropriate) or _____ months.
Animals were quarantined before shipment _____

(place of quarantine

_____

and number of days)

During the quarantine period, the animals had no contact with other animals; were clinically examined daily and their body temperature was measured; on the day of issuing the certificate, they were examined, no patients or suspects of the disease were identified. During the quarantine period, material from animals was examined in the state veterinary laboratory _____

_____

(indicate the name of the laboratory)

and the following results were obtained:

Name of the disease	research Date	Research method	Research results

Immunization was carried out against:

_____ "__" _____ 20__
_____ _____ "__" _____ 20__
_____ _____ "__" _____ 20__
_____ "__" _____ 20__
_____ "__" _____
20__ _____ _____"__ "_____ 20__

Animals treated against parasites:

_____ "__" _____ 20__
_____ "__" _____ 20__
_____ "__" _____ 20__

packaging material and accompanying consignments come directly from farm-supplier and not contaminated with pathogens of infectious diseases.

Animals are sent _____

(destination and recipient)

_____

with specification (package list, waybill) N _____ dated "__" _____ for

_____

(fattening, breeding, selling, slaughtering, etc.)

and follow _____

(railway, water, road, air

_____

transport; car, wagon, ship name, flight number, etc.)

along the route:

_____

(indicate the main points of the route)

_____

SPECIAL NOTES:

_____

(to be filled in when sending animals that have been particularly ill

_____

dangerous diseases, transportation under special conditions and

_____

special permission (indication), by whom it was given, number and date)

_____

(marks on inspection during loading, unloading, en route)

Comply with Uniform veterinary requirements. The vehicle has been cleaned and disinfected. The certificate is presented for control during loading.

Received a veterinary certificate

_____

(signature and full title of position)

_____

(surname, initials)

Veterinary certificate issued

_____

(signature and full title of position)

_____

(surname, initials)

Form No. 2

CUSTOMS UNION

_____

(name of the authorized body

_____ **in the field of**

veterinary medicine of the member country of the Customs Union

VETERINARY CERTIFICATE*

BY Series No. __ - _____ **from "__" _____ 20__**

I, the undersigned, have issued this Veterinary Certificate

_____

(to whom - the name of the legal entity or full name

_____

individual)

in that _____

(product name)

_____ **in**

the amount of _____ _____ _____

(places, pieces, kg) (packaging) (labeling)

developed by

_____

(name of the enterprise, full name of the owner, address)

_____

_

(date of production)

subjected to veterinary and sanitary examination in full; made from raw materials that have passed veterinary and sanitary examination (strike out the unnecessary) and recognized as fit

for:_____

_

(realizations without restrictions, with restriction

_____

- give reasons

_____

_

(or processing according to the rules of vetsanekspertiza)

comes out of _____

(address and location of products)

and sent to _____

(mode of transport, route, transportation conditions)

at _____ _____ **to** _____

(name and address of recipient) **(name, number and date of issue of the shipping document)**

The products have been subjected to additional laboratory tests_____

_____

(laboratory name, expertise number and research results)

SPECIAL MARKINGS _____

(indicate the epizootic well-being of the area, etc.)

Comply with Uniform veterinary requirements.
The vehicle has been cleaned and disinfected.
The certificate is presented for control and transferred to the consignee.
Loading inspection notes.

Received a veterinary certificate **Veterinary certificate issued by**

_____ _____

(signature and full title of position) **(signature and full title of position)**

_____	_____
(surname, initials)	**(surname, initials)**

Marks of veterinary and sanitary inspection during loading.

Date and name loading point, where was held veterinary examination	Inspected products, raw materials		Signature official, producing inspection and printing
	Places, pieces	Weight, kg)	

Form No. 3

CUSTOMS UNION

_____

(name of the authorized body

_____ **in the field**

of veterinary medicine of the member country of the Customs Union

VETERINARY CERTIFICATE*

BY Series No. __ - _____ **from "__" _____ 20__**

I, the undersigned, have issued this Veterinary Certificate

_____

(to whom - the name of the legal entity or the full name of the individual)

in that _____

(name of technical raw material or feed)

in the amount of _____

(places, pieces, kg) **(packaging) (labeling)**

origin _____

(slaughterhouse, dead, prefabricated, obtained from healthy or sick animals)

developed (prepared) under the control of an official of the authorized body

_____

_

(name of the enterprise, full name of the owner, address)

_____

and found fit for _____

(sales, processing, use

_____

without restrictions, if with restrictions - indicate the reasons and mode)

_____

comes out of _____

(address and location of cargo)

and sent to _____

(mode of transport, route)

v _____

(name and address of recipient)

on _____

(name, number and date of issue of the shipping document)

Raw materials (feed) subjected to _____

(disinfection, washing, conservation -

_____

indicate the method and name of drugs, research - indicate

_____

name of the laboratory, number, date of issue of the examination and the results of the studies)

_____ **SPECIAL**

MARKINGS_____

(indicate the epizootic well-being of the area,

_____

and other)

Comply with Uniform veterinary requirements. The vehicle has been cleaned and disinfected. The certificate is presented for control and handed over to the consignee.

Loading inspection notes.

Received a veterinary certificate **Veterinary certificate issued by**

_____ _____

(signature and full title of position) **(signature and full title of position)**

_____ _____

(surname, initials) **(surname, initials)**

Marks of veterinary and sanitary inspection during loading.

Date and name loading point, where was held veterinary examination	Inspected products, raw materials		Signature official, producing inspection and printing
	Places, pieces	Weight, kg)	

APPENDIX 5

SAMPLES OF STUDENTS' INTERNSHIP DIARY

3 COURSES NISPO

date	Place of work	Content and scope of work performed	Note and marks lead- for practice
one	2	3	4
26.07. 2016 Nov.	SPK "Olgovskoe", MTF Babinici	**Obstetrics, gynecology and biotechnology of animal reproduction** **Conducted a clinical examination and helped sick cow No. 03033. Anamnesis: the cow is kept in a typical barn for 200 heads, the method of keeping is tethered, exercise is daily, the diet includes: haylage, straw and flour from grain mixture. The cow calved 7 days ago. The afterbirth did not separate on its own and was separated by a veterinarian in an operative way on the second day after the birth of the calf.** **Symptoms: General condition is satisfactory. Appetite saved. The act of urination and defecation is not disturbed. T - 39.0 ° C, P - 66 beats / min., D - 26 resp. mov./ min., R5 - 6.** **Purulent exudate is released from the genitals. Rectal examination: the uterus hangs down into the abdominal cavity, the horns are the width of a palm, the walls of the horns are flabby, fluctuation is noted, rigidity is weakened, the separation of purulent exudate increases during uterine massage.** **Diagnosis. Acute purulent-catarrhal endometritis (Endometritis purulenta et catarrhalis acuta)** **Treatment: the animal was isolated, oxytocin was injected subcutaneously at a dose of 10 IU per 100 kg of live weight. After uterine massage, 100 ml of the drug "Tilozinokar" was injected intrauterinely, warmed up to 38₀C. Re-introduction of the drug was prescribed on 02/29/2016.** **A cow weighing 500 kg.** **Rp.: Oxytocini (1 ml-10 ED) 100.0** **DS Subcutaneous. 5 ml per injection. Three times in 48 hours.** **#**	

one	2	3	4
		Rp.: Sol. Septocidi 200.0 **DS Outdoor. To treat the injection site.** **#** **Rp.: Sol. Kalii permanganati (1:5000) 1000.0** **DS Outdoor. For the toilet of the external genital organs.** **#** **Rp.: Tilozinocari 1000.0** **DS Intrauterine. 100 ml per injection. Three times in 48 hours. Continuation of treatment. In the following days, carry out therapeutic measures, describe the dynamics of the course, diseases and therapeutic measures, if they differ from the initial ones. When the animal recovers, the following is written in the diary: Outcome: Recovery.**	
07/27/2016	**SPK "Olgovskoe" MTF Babinici**	**Conducted a clinical examination of the cow inv. No. 66677 at the age of 7 years, black-motley breed, satisfactory fatness, live weight 400 kg, calving 10.10.16 g, daily milk yield 18 kg.** **Anamnesis: the cow is kept in a typical cowshed for 200 heads, the method of keeping is tethered, exercise is daily, the diet includes: haylage, straw and flour from a grain mixture. According to the milkmaid, the cow shows a painful reaction when massaging the udder, milking is difficult, the milk is heterogeneous in appearance.** **Symptoms: the general condition of urinationsatisfactory. Appetite saved. Act and defecation is not disturbed.** **T - 39.8 ° C, P - 63 beats / min., D - 14 respirations. mov./min., R_5 - eight.** **On palpation of the mammary gland, pain was found in the lobes of the right half of the udder, the parenchyma was dense, the local temperature was elevated, the nipples of the affected lobes were hot and painful. The exudate of non-uniform consistency, with flakes and clots, is given off.** **Diagnosis: Acute catarrhal mastitis (Mastitis catarrhalis acuta).** **Treatment: it is recommended to limit the feeding of concentrates by 50%, to milk the cow in a special milking machine for milking cows with mastitis. Before milking, massage the udder from above -**	

one	2	3	4
		down, inject the drug oxytocin, after the evening milking, inject the drug "Tetra-delta" into the affected udder lobes. A cow weighing 500 kg. Rp.: Oxytocini (1 ml-10 ED) 100.0 DS Subcutaneous. 5 ml per injection. Once. # Rp.: Sol. Septocidi 200.0 DS Outdoor. To treat the injection site. # Rp.: Tetra delti 10.0 DTD #2 S. Intracisternal. After evening milking. 1 syringe into the teat canal of the affected parts of the udder. Once. # Rp.: Sol. Septocidi 200.0 DS Outdoor. For the treatment of nipples. Continuation of treatment. In the following days, carry out therapeutic measures, describe the dynamics of the symptoms of the disease and therapeutic measures, if they differ from the initial ones. When the animal recovers, the diary writes: Outcome: Recovery.	
Pathological anatomy, autopsy and forensics			
08/02/2016	SPK "Olgovskoe" MTF Babinici	Produced an autopsy of the corpse of a calf at the age of 7 days. The autopsy revealed the following pathoanatomical changes: 1. Acute catarrhal abomasitis and enteritis. 2. Hemorrhages in the mucous membrane of the abomasum and small intestine. 3. Dense folds of casein in the cavity of the abomasum. 4. Septic spleen. 5. Serous inflammation of the mesenteric lymph nodes. 6. Granular degeneration and venous hyperemia of the liver and kidneys. 7. Partial atrophy of the thymus and spleen. 8. Dehydration (exicosis), general anemia, exhaustion. were sent to the laboratory for bacteriological examination.	

one	2	3	4
		pieces of the liver, kidneys, heart, spleen, lymph nodes and tubular bone. During the study of the pathological material, pathogenic E coli was isolated. Nosological diagnosis - escherichiosis (septic form).	
Epizootology and infectious diseases			
21.07.16	SPK "Olgovskoye" Dairy complex	Under the leadership of the chief veterinarian Isakov I.R. participated in carrying out tuberculosis with the aim of testing cattle for tuberculosis. 260 cows and 135 heifers and heifers were subjected to the study. For tuberculinization, purified PPD-tuberculin for mammals was used, manufactured on September 10, 2014 by JSC "BelVitunifarm", shelf life 5 years, series No. 31, control No. 31. dose of 0.2 ml. Before the introduction of tuberculin in the pre-shorn area (20.01.15), the thickness of the skin fold was measured with a cutimeter. The measurement data were entered into the inventory to the act of tuberculinization. Then the injection site was treated with 70% ethanol and then the allergen was introduced into the prepared area. Rp.: Spiritus aethylici 70% - 395.0 DS Outdoor. To treat the injection site of tuberculin (at the rate of 1 ml per animal).	Accounting for results tatov tuber-culinization to produce after 72 hours sa
07/22/16	SPK "Olgovskoye" Dairy complex Cowshed 2	Under the guidance of the veterinarian Petrashkov E.D. conducted blood sampling from 110 heifers for serological testing for leukemia. Animals were fixed by the nasal septum by 2 assistants from among the animal breeders of the complex. The puncture site of the jugular vein was treated with 70% ethanol. To take blood, the jugular vein was clamped slightly below the proposed puncture site. The puncture was made with a sharp blow so that the needle simultaneously passed through the skin and the wall of the jugular vein, at an angle of 45° upwards against the blood flow. Blood sampling was carried out in glass test tubes. After completion of blood sampling, the jugular vein was clamped above the puncture site, after which the needle was removed. Then, under the supervision of a veterinarian, he prepared a statement and accompanying documentation for sending blood samples to the diagnostic department of the Vitebsk State Medical Institution.	According to the result check there data follow-up (expertise 1148 off 01/26/15.) seropositive live animals votny not identified

one	2	3	4
		rayvetstation. Rp.: Spiritus aethylici 70% - 55.0 DS Outdoor. To treat the place of blood sampling, 0.5 ml per animal.	
07/23/16	SPK "Olgovskoye" Dairy complex	As part of a commission of representatives of the district veterinary station, under the leadership of the chief veterinarian Isakov I.R. took part in the registration of the reaction to tuberculin, introduced on January 21, 2015. To do this, cutimeter was used to measure the thickness of the skin fold at the injection site of tuberculin. The measurement data were entered into the inventory to the act of tuberculinization. Next, the difference in measurements for each animal was determined. Based on the results of the tuberculinization, an appropriate act was drawn up.	about the result am researching ai Animals, positively reacting and tuberculin, not detected
07/24/16	SPK "Olgovskoye" Dairy complex	Under the guidance of veterinarian Sidorov I.K. took part in the preventive disinfection of the cowshed, with an area of 3,500 m_2 4% hot (70°C) sodium hydroxide solution using DUK. 1 m_2 area spent 1 liter of solution. After disinfection, the room was left closed for 2 hours. Then they ventilated, the feeders were washed with water. A total of 140 kg of sodium hydroxide was used. Issued an act for disinfection and took 20 samples to control the quality of disinfection.	Disinfect-tion check-dena quality-essentially
02.08.16	SPK "Olgovskoe" pig farm	Under the guidance of veterinarian Mironchik P.G. carried out primary vaccination of 90 piglets over the age of 2 months against erysipelas. For immunization, a deposited vaccine against swine erysipelas was used, manufactured on October 20, 2014 by BelVitunipharm OJSC, expiration date 12 months, batch No. 74, control No. 74. The vaccine was administered subcutaneously in the neck (behind the ear) at a dose of 0.3 ml. The injection site of the vaccine was treated with a 0.5% solution of carbolic acid. The remains of the biological product are disinfected by boiling. Rp.: Solutionis Acidi carbolici 0.5% - 45.0 DS Outdoor. To treat the injection site of the vaccine.	Repeated vaccine-check-up sti through 12-14 days.
08/03/16	SPK "Olgovskoye" v. Olgovo (private sector)	Together with the veterinary epidemiologist of the GLPU "Vitebsk regional veterinary station" Meleshko D.A. vaccinated 120 calves of 1.5 months of age against pasteurellosis. For vaccination, a semi-liquid aluminum hydroxide vaccine against pasteurellosis in cattle was used, manufactured by JSC "BelVitunifarm" on 07.2015, series 23, expiration date - 12 months. vaccine	

one	2	3	4
		was administered intramuscularly in the area of the croup at a dose of 5 cm3 per 1 animal. The injection site was pre-cut and treated with 70% ethanol. Rp.: Spiritus aethylici 70% - 60.0 DS Outdoor. To treat the injection site of the vaccine (at the rate of 0.5 cm3 per animal). In total, 600 cm were used3 vaccines, 60 cm3 ethyl alcohol, 60 g of cotton wool. Complications during vaccination were not observed. I drew up an appropriate act for the vaccination.	
Parasitology and parasitic animal diseases			
04.08.16	Diagnostic cases of GLPU "Viteb-sky rayvetstation"	I got acquainted with the work of the diagnostic department of the RVS (for details, see the corresponding section of the program).	
08/13/2016.	SPK "Olgovskoye"	Under the guidance of veterinarian Ivanov I.P. carried out prophylactic deworming of 846 heads of pigs aged 2.5-4 months with tetramizole 20% at a dose of 0.05 g per 1 kg of live weight by a group method against ascariasis. The anthelmintic was fed in the morning on an empty stomach in a mixture with moistened compound feed, reducing the morning feed intake by 1/3. He drew up an act for the deworming carried out, in which he recommended to carry out three daily cleaning of fecal matter, followed by their biothermal disinfection, and disinfestation of premises and care items with a hot 4% solution of sodium hydroxide (other preparations). After 12 days, conduct a selective (from 30 heads) control coproscopic examination. Rp.:Tetramizoli granulati 20% - 2115.0 DS Internal. Set with feed group method. Once Examined 200 cows for ectoparasitic diseases. 20 animals with skin and hair lesions were identified. Anamnesis: cows are kept in a typical cowshed for 200 heads, the method of keeping is tethered. Exercise daily. Diet: hay 2 kg, haylage 15 kg, root crops 5 kg, concentrates 0.5 kg per 1 liter of milk. According to the operator of machine milking, the animals are worried, productivity is reduced. Symptoms: animals are restless, the skin is not elastic, flaky, there are abrasions,	

one	2	3	4
		alopecia. **Special studies: small insects were found in the area of the head, neck, and sides: 1-3 mm, wingless, the body is oblong-oval, light brown in color, flattened in the dorsoventral direction, the head is wider than the chest, the mouth apparatus is of a gnawing type. The insects were identified as Bovicola bovis. Scabies was excluded on the basis of the results of the study of scrapings taken at the border of healthy and diseased tissue. Diagnosis: Bovicolosis, detected in 20 heads (10%) of animals. Treatment: The period of total double treatment of animals with 0.05% water emulsion of ratox by spraying with a ten-day interval was determined. Sick animals (20 heads) were treated for therapeutic purposes, 180 animals were treated for prophylactic purposes.** **Rp.: Ratoxi 200 ml** **DS Outdoor. Before use, dilute 100 ml of the drug in 200 liters of water. Apply by spraying 1 liter per animal per treatment. Repeat treatment after 10 days.** **Simultaneously with the treatment of animals, the premises were disinfested. Cultivated area 2050 m_2 (barn length 71m, width 21m, wall height 3m). The consumption rate of the working solution is 100 cm per 1 m. The working solution was prepared at the rate of 20 cm_3drug in 10 liters of water. Rp.: Ratoxi 500 ml** **DS For room disinfection. Before use, dilute 410 ml of the drug in 205 liters of water. Apply by spraying 0.1 liters per 1 m_2...**	
Internal diseases of animals			
02.08. 2016 Nov.	**SPK im. Dzerzhinsky,** **farm number 2**	**Conducted clinical examination and treatment of a black-motley cow, average fatness, live weight of about 450 kg, No. 05675.** **Anamnesis: Animal at the age of 5 years. He is kept in a typical room, free-standing, watering place from automatic drinking troughs. Diet: feed mixture (hay 2 kg, corn silage 10 kg, mixed grass haylage 10 kg, mixed fodder 3 kg). Got sick 2 days ago. The milkmaid noticed that the cow refuses to feed, groans when standing up, and there is no chewing gum. No medical assistance was provided. Symptoms: T-39.2, P-84, D-34, R_5-4. Hypotension of the stomach. At pressure in**	

one	2	3	4
		the area of the xiphoid cartilage, the test of the withers, tapping along the line of attachment of the diaphragm, the animal is worried, bends, groans. Diagnosis (preliminary): traumatic reticulitis. Treatment: 12-hour starvation diet without restriction of watering, a magnetic probe ZMU-1 (Korobov) was placed, after 2 hours the probe was removed. It contained 2 nails 4 and 6 cm long. Diagnosis (final): traumatic reticulitis (Reticulitis traumatica). Treatment. Intravenously 200 ml of 10% calcium chloride solution (prescription), 200 ml of 40% glucose solution (prescription), daily for 3 days. Observation of the clinical condition of the animal during the week. Outcome: recovery 08/12/2016	
03.08. 2016 Nov.	SPK im. Dzerzhin-sky, farm number 2	Treatment of pregnant dry cows with trivitamin containing vitamins A, D_3 and E). In total, 100 goals were fortified. The drug was administered intramuscularly at a dose of 5 ml per head. The injection site was trimmed and treated with 70% alcohol. Consumed: 500 ml of trivitamin (write a prescription), 50 ml of denatured alcohol (write a prescription), 50.0 g of white cotton. An act was drawn up for processing (see Appendix 4).	
Diseases of small animals and birds			
July 28, 2016	Branch "Servolux Agro"	He arrived at the Servolux Agro branch of SZAO Servolux for an internship. I met with the head of the veterinary service Aleksey Gennadyevich Kurzhalov, who introduced me to the specialists of the poultry farm. The chief engineer for labor protection conducted an introductory safety briefing. Kurzhalov A.G. informed about the economic and epizootic situation at the poultry farm. We determined the sequence of the internship.	
03/17/2016	Branch "Servolux Agro"	Kurzhalov A. G. conducted a tour of the territory of the poultry farm. The Servolux Agro branch of SZAO Servolux is one of the five largest enterprises in the Republic of Belarus engaged in the production of broiler meat. Branch "Servolux Agro" CJSC "Servolux" is located 15 kilometers from the city of Mogilev. The territory of the poultry farm occupies 55 hectares.	

one	2	3	4
		The structure of the branch is diversified, it has the following divisions: **- broiler shop (22 poultry houses);** **- shop for slaughter and processing of poultry (capacity 6 thousand heads of slaughter per hour);** **- feed warehouse (with a capacity of 1000 tons of compound feed);** **- support units (veterinary service, car fleet, tractor fleet, mechanical repair shop, energy service, construction service, etc.);** **- branch "Guslishche".** **The technological process of production in the Servolux Agro branch includes the following main stages and processes:** **- purchase of daily young animals;** **- growing broiler chickens;** **- slaughter of a bird;** **- production of natural semi-finished products from poultry meat;** **- quality control at all stages of the process;** **- sorting and packaging of products.** **The broiler shop includes 19 poultry houses for floor housing of broiler chickens, consisting of three halls, united by a common technological corridor. Each poultry house has a capacity of 75,000 broiler chickens, as well as 3 cage houses with a capacity of 80,000 birds each.** **The broiler shop uses equipment for feeding and watering birds from leading European and domestic manufacturers: Choretime (Netherlands), Bio-Dutchman (Germany), Roxell (Belgium), Caliber (Belarus). Ventilation by Fancom (Netherlands). Heating system of JSC "Brestselmash" (Belarus). In poultry houses for keeping broiler chickens, the technological processes of feeding, watering, ventilation and heating are controlled by a computer in automatic mode.** **The branch grows such crosses as "Ross", "Cobb". Feed production is carried out by JSC "Ekomol" in the city of Orsha. All reared poultry goes to the poultry slaughter and processing shop, where a line for slaughter and processing of poultry meat by Hein (Netherlands) is installed,**	

one	2	3	4
		packaging machines Waldyssa (Switzerland), weighing complex Bizebra (Austria), as well as cold stores with a capacity of up to 300 tons. Products manufactured by the branch are sold not only in the city of Mogilev and the Mogilev region, but also in other regions of the republic and abroad under the Petrukha trademark. In October 2007, an iron removal station was put into operation to improve the quality of water consumed. The production of broiler chicken meat in the branch is non-waste, that is, all waste during slaughter and cutting of poultry (feathers, entrails, etc.) is used in the production of feed flour. In 2016, 24,500 tons of broiler meat in live weight were produced. For the period of 2016, according to the results, the increase in live weight amounted to 60.1 grams, feed consumption - 1.65 centners per unit. per 1 centner of growth; safety - 95-96%, for individual batches this figure is more than 97%.	
July 29, 2016	Private sector Mogilev	Conducted a clinical examination and provided assistance to a cat named "Barsik" at the age of 6 years, Persian breed. Anamnesis: The animal is kept in an apartment. Diet: fish, chicken offal. According to the hostess, the cat has been restless for the last two days, often sits down, urine is excreted in small portions, with an admixture of blood. Symptoms: General condition depressed. T - 39.0 ° C, P - 120 bpm, D - 25 resp. movement/min. On palpation, there is pain in the kidney area, the bladder is full. When pressed, urine does not come out. To empty the bladder and obtain urine for the study, catheterization was performed. Technique: performed premedication with Xila at a dose of 0.5 ml, fixed the cat in the dorsal position, preliminarily lubricated the catheter (children's ureteral catheter) with sterile vaseline and carefully, effortlessly introduced it into the urethra. I attached a syringe with warm 0 to the catheter. 5% solution of novocaine and introduced a solution to relax the smooth muscles of the urethra. When it entered the bladder, urine began to be actively excreted from the catheter. In the study of urine found: beats. weight - 1.015, increased content of erythrocytes, leukocytes, protein in urine, tripel phosphate crystals (struvites) were found.	

one	2	3	4
		Diagnosis: "Urolithiasis" **Treatment: Removed spasm of smooth muscles and pain by introducing papaverine hydrochloride at a dose of 0.5 ml intramuscularly. To destroy and remove stones, he prescribed cystone at a dose of 1 tablet 2 times a day for 5 days and 14 days at a dose of 0.5 tablets 2 times a day. To remove intoxication - 5% glucose solution at a dose of 80 ml intravenously. To relieve inflammation in the urinary system - baytril 5% at a dose of 0.5 ml subcutaneously for 5 days in a row. Rp.: Sol. Papaverini hydrochloridi 2% - 2.0** **Dtd #3 in amp.** **S. Subcutaneous. 0.5 ml per injection 2-3 times a day for 5 days.** **#** **Rp.: Xyla 2% - 50.0** **DS Subcutaneous 0.5 ml per injection for premedication when placing a catheter into the urethra.** **#** **Rp.: Sol. glucose sterile. 5% - 500.0** **DS Subcutaneous. 80 ml per injection once a day for 5 days.** **#** **Rep.: Tab. Cystoni No. 100** **DS Internal. 1 tablet, 2 times a day for 5 days, ½ tablet for 14 days.** **#** **Rp.: Sol. Bayrili 5% - 100.0** **DS Internal. 0.5 ml per injection for 5 days in a row.** **#** **Rp.: Spiritus aethylici 70% - 0.5 ml.** **DS Outdoor. For the treatment of the puncture site of the vein.** **Continuation of treatment. (In the following days, carry out therapeutic measures, describe the dynamics of the course of the disease and therapeutic measures, if they differ from the initial ones. When the animal recovers, the following is written in the diary: Outcome: Recovery.**	

one	2	3	4
July 30, 2016	Private sector Olgovo village	He vaccinated 20 dogs belonging to the inhabitants of the village of Olgovo against rabies. For immunization, I used a liquid anti-rabies cultural inactivated vaccine against rabies from the strain “71 BelNIEV-VGNKI”, manufactured on December 20, 2015 by the RUE “Institute of Experimental Veterinary Medicine named after A.I. Vyshelesskogo” with a shelf life of 18 months, series No. 05, state control No. 5. The biological product was administered intramuscularly at a dose of 1 ml. The injection site was treated with 70% alcohol. Used the vaccine within 2 hours after dissolution, unused residues of the drug were destroyed by boiling. 20 doses of the vaccine, 10 g of white cotton wool, 10 ml of ethyl alcohol were used up. Rp.: Spiritus aethylici 70% - 10.0 ml. DS Outdoor. For treatment of the injection site, 0.5 ml per animal.	
July 31, 2016	Branch "Servolux Agro"	He took part in the fortification of 18-day-old chickens, in the amount of 80,000 heads, of the Ross cross to increase the body's immunity and prevent diseases. Fortification was carried out by drinking the drug "Vitamix". The drug was introduced into the drinking system using a dispenser. An act was issued for the vaccination.	
08/01/2016	Branch "Servolux Agro"	Under the guidance of a veterinarian, he took blood from broiler chickens from the axillary vein. Poultry house No. 22, cross "Ross", at the age of 40 days to determine the intensity of immunity. Birds were fixed by limbs and wings. A feather was plucked at the puncture site and treated with 70% alcohol. Compiled a cover letter to be sent to the Virology Department of the Belgosvet Center. Rp: Spiritus aethylici 70% - 20.0 ml. DS Outdoor. To treat the injection site.	
08/04/2016	Branch "Servolux Agro"	Together with a veterinarian, he took part in the vaccination of broiler chickens at the age of 8 days against Newcastle disease with a live dry vaccine “Nobilis ND Clon 30”. Series: 08055EM02, date of manufacture 06.15, expiration date until 06.17. Broiler chickens were aerosolized using a knapsack sprayer in poultry house No. 2, halls 1, 2, 3. The number of heads was 89,300. An act was drawn up for the vaccination.	

one	2	3	4
08/05/2016.	Branch "Servolux Agro"	Under the guidance of a veterinarian, he performed an autopsy of the corpses of dead birds. The autopsy was performed in overalls (gown, rubber boots, shoe covers, rubberized apron and sleeves). During external examination of the bird, the following is observed: dry skin and visible mucous membranes, the corpse is emaciated, pallor of the crest, beard and earrings, serous edema in the subcutaneous tissue, muscles are reduced in volume. He gave the corpse a dorsal position, cut the limbs along the hip joints. The abdominal wall was cut in the middle from the cloaca to the point of the sternum and continued to the right and left to the hypochondrium. After that, the sternum bone was removed by cutting the sternal ribs, caracoid bone, and clavicle on both sides with rib scissors. Examined the thoraco-abdominal cavity: there is no extraneous content, the position of the organs is normal. He took out the liver first, then the stomachs and intestines. The spleen was removed along with the intestines. Brown liver. Then he took out the heart, peeled the lungs out of the intercostal space with a scalpel, removed the kidneys and adrenal glands. The liver and myocardium are brown. The oral cavity, larynx, pharynx, esophagus, goiter, and also the thymus were opened without removing them from the corpse. To do this, he introduced a sharp branch of scissors into the oral cavity and cut the lower jaw at the base of the beak, as a result, the oral cavity and pharynx were opened for inspection. Then he cut the esophagus, goiter, larynx and trachea. Examined their mucous membrane and contents. Transudate in serous cavities, thick blood. Pathological anatomical diagnosis: 1) Absence of fat in the fat depot. 2) Serous edema of the subcutaneous tissue. 3) Skeletal muscle atrophy. 4) Brown atrophy of the liver, myocardium and skeletal muscles.	

		5) General anemia. **Diagnosis: "Alimentary dystrophy."** After opening, the hands were washed with soap and water and disinfected with a 4% formalin solution. The clothes were sent for disinfection.	
one	2	3	4
08/06/2016	Branch "Servolux Agro"	He took part in the aerosol disinfection of poultry house No. 5, with an area of 600 m2, with a 36% formaldehyde solution. Disinfection was carried out using an aerosol generator. Exposure 12–24 hours. An act in three copies was drawn up for the disinfection.	
08/07/2016	Branch "Servolux Agro"	Together with the veterinarian, he carried out quality control of disinfection. The method is based on growing the indicator medium under the influence of the drop and gas phases of formaldehyde aerosol. Endo medium is used as an indicator, which, under the influence of formaldehyde in the process of aerosol disinfection, acquires a sharply defined red color. Before disinfection, Ulengut indicator tubes are placed on the floor, walls and ceiling of the room, and on the equipment located on it. On average, 10–15 test tubes are required per room. The paraffin caps are removed from the tubes before placement. Test tubes are installed on the floor of the room, and they are attached to the walls with the open end up. On the ceiling fix the open end down. Then, with a ruler with a millimeter scale, measure the length of the colored column of the indicator medium.	
08/08/2016	Branch "Servolux Agro"	Under the guidance of a senior laboratory assistant, he determined the acid number of the yolk to determine the quality of the hatching egg. To do this, I took a 2 g sample of yolks, ground it well in a mortar with 20 ml of alcohol-ether (first I added 5–8 ml of ether alcohol and ground the sample, after which the contents were poured into a flask). I rinsed the mortar with the remaining amount of alcohol-ether, poured it into the same flask and titrated with 0.1: N KOH in the presence of phenolphthalein (5 drops per 20 ml of alcohol-ether) until a stable pink color did not disappear within 1 minute. The calculation was carried out according to the formula: X \u003d A x Kx 5.6, where	

		V X - acid number in mg KOH A is the amount of ml of KOH solution used for sample titration, minus the amount of KOH solution used for titration of alcohol-ether solution; B - sample of yolk in gr;	
one	2	3	4
		K is the correction factor to the KOH solution for recalculation to the exact 0.1 N solution; 5.6 - content of KOH in mg in 1 ml of 0.1 N solution. We got the results: X = 4.49 mg KOH/g. This indicator for hatching eggs should not exceed 6.	
08/09/2016	Branch "Servolux Agro"	Familiarized with the documentation. He mastered the method of setting RPHA to detect specific antibodies to the Newcastle disease virus in the blood serum of chickens. 60 blood samples were examined, the date of blood sampling was March 2, 2015, the date of vaccination was February 9, 2015, poultry house No. 22, the birds were 41 days old. To set up the reaction, 0.2 ml of physiological saline is poured into 12 wells. Then, 0.2 ml of the test serum is added to the 1st well, pipetted three times and 0.2 ml of the mixture is transferred to the 2nd well, etc. until the required dilution is obtained. After that, 0.2 ml of the working dilution of the virus is added to all wells. The plates are shaken, and after 30–45 minutes of serum contact with the virus, 0.5 ml of a 1% erythrocyte suspension is added to each well. For the accuracy of accounting for RZGA, the control of the working dose of the virus is re-set. The reaction is carried out at room temperature and recorded within 20–45 minutes. In the presence of antibodies in the blood serum, hemagglutination is delayed, then the erythrocytes precipitate in the form of a button with smooth edges. The results are entered into the forms for the control of immunity in Newcastle disease. Group immunity is considered established in the presence of 80 percent or more of the tested sera with an antibody titer of 1:8 or higher.	

08/10/2016	Branch "Servolux Agro"	Conducted deratization in the poultry slaughter and processing shop. On the territory of the workshop there are 40 containers for baits, which are arranged in accordance with the deratization scheme. They are placed in three zones: 1) External zone 1 (it is located along the perimeter of the enterprise); 2) External zone 2 (located on the territory of the enterprise);	
one	2	3	4
		3) Inner zone 3 (located in utility rooms). Containers in the first zone are installed every 50 meters, in the second - every 30 meters, in the third - in the most vulnerable places for the penetration of rodents in such a way that it does not affect the activities of the organization. I checked the containers for the presence of dead rodents in them, changed the baits in the containers to fresh ones. Also, ultrasonic emitters (for repelling rodents) are placed in the production premises.	
08/11/2016	Private sector Village Staroe Selo	Conducted a clinical examination and assisted a kitten named "Sima" at the age of 6 months, British breed. Anamnesis: The animal is kept in an apartment. Diet: food - "Royal Canin" for kittens. According to the hostess, the kitten had spots covered with crusts on its back and stomach. The same spots appeared on the hands of the hostess. Symptoms: General condition depressed. T - 38.5 ° C, P - 120 bpm, D - 25 resp. movement/min. Examination of the head and forelimbs revealed sharply demarcated spots covered with a small white coating with a red rim. During luminescent analysis using a lamp with a Wood filter OLDD-01, an emerald-green glow of the affected foci was established, and a glow was also observed in the region of the inner surface of the paws on the hair without skin damage. Light microscopy of scrapings from damaged areas of the skin revealed spores of the fungus located randomly in the hair and on its surface. The preparation for microscopy was prepared as follows: with a blunt scalpel on the border of healthy and damaged skin, the epidermis was scraped off into a Petri dish placed below and poured with a 10% alkali solution, left for 20 minutes,	

		cover glass. The preparation was viewed at a magnification of 10x40. Diagnosis: "Microsporosis" Treatment: For treatment prescribed shampoo "Nezopharm" - wash the animal every 4-5 days until a negative fluorescent study. Inside - 1/4 tablet of ketoconazole (0.2 g) once a day for 2 weeks. As a specific treatment, I applied the Vakderm vaccine twice (1 ml each) with an interval of 10 days.	
one	2	3	4
		Rep.: Tab. Ketoconazoli 0.2 Dtd No. 10. DS Internal. 1/4 tablet, once a day for 14 days. # Rp.: Spiritus aethylici 70% - 0.5 ml. DS Outdoor. To treat the injection site. (In the following days, carry out therapeutic measures, describe the dynamics of the course of the disease and therapeutic measures, if they differ from the initial ones. When the animal recovers, the following is written in the diary: Exodus: recovery.	
08/12/2016	Branch "Servolux Agro"	I talked with the head of the veterinary service A. G. Kurzhalov. We summed up the results of the internship, received the necessary documents. Prepared reporting documentation.	
General and private surgery, ophthalmology			
03.08. 2016 Nov.	SPK "Olgovskoe" Mo-local complex	During a surgical medical examination in cow No. 1302, a black-and-white breed, lameness was detected on the right thoracic limb. Anamnesis: the cow is kept in a typical cowshed for 200 heads, the method of keeping is tethered, exercise is daily, the diet includes: haylage, straw and flour from a grain mixture. The cow got sick 7 days ago. Initially, slight lameness was noted, then it gradually increased. The animal was not treated. Symptoms: T - 39.0 ° C, P - 66 beats / min, L - 26 breaths. movement/min. R, - 6. The general condition is satisfactory. Appetite saved. The act of urination and defecation is not disturbed. When moving, the animal has lameness of the support type of moderate degree. At rest, support on the toe part of the right thoracic limb is limited, the limb is retracted outward. At	

		palpation of the hoof of the plantar part, there is severe pain, an increase in local temperature and pulsation of the digital arteries. When clearing, a liquid dark gray exudate is released. Diagnosis. Superficial purulent pododermatitis of the lateral hoof of the right thoracic limb (Pododermatitis superficialis puruienta). Treatment: The animal was fixed in a standing position in the machine for	
one	2	3	4
		orthopedic treatment of hooves. The distal area of the right thoracic limb was washed with warm water and soap and treated with an antiseptic solution of potassium permanganate 1:5000. Spent interdigital anesthesia with a 2% solution of novocaine. A hemorrhage is noted on the plantar part of the hoof. The exfoliated horn and necrotic tissues were removed with a hoof knife. Around the pathological focus, a healthy horn was thinned to bend under the finger. The inflamed area of the base of the skin was treated with a 3% hydrogen peroxide solution. They were dried by tamponing, a bandage with the preparation "Biochelate gel" was applied to the hoof. The animal was placed in a pen with dry bedding. Recommended to temporarily limit exercise. Rp.: Biohelati gel 200.0 DS Outdoor. Applications of napkins for 200 before recovery. # Rp.: Sol. Kalii permanganatis 1:5000-1000 ml DS Outdoor. For washing the pathological focus. # Rp.: Sol. Novocaini steril. 2% -100 ml pro injectionibus DS For pain relief, 20 ml per injection. Continuation of treatment. In the following days, carry out therapeutic measures, describe the dynamics of the course, diseases and therapeutic measures, if they differ from the initial ones. When the animal recovers, the diary writes: Exodus: recovery.	
08/04/2016	SPK "Olgovskoe" pig-farm	Under the guidance of a veterinarian, after a clinical examination, he castrated 120 boars at the age of 20-25 days. Operation technique: the animals were fixed in the dorsal position.	

		The surgical field was washed with warm water and soap and treated with an antiseptic solution "Septocid". The incision was made parallel to the suture of the scrotum, separating the skin, the muscular-elastic membrane, the fascia of the scrotum and the common vaginal membrane. Then he severed the vaginal ligament. I put a silk ligature on the thinned part of the spermatic cord. The spermatic cord was excised, retreating 0.5-1 cm from the ligature towards the testis.	
one	2	3	4
		I did the same with the second seed. The wound cavity was powdered with tricillin powder. The animals were placed in specially prepared pens, where they were previously mechanically cleaned and disinfected. Rp.: Sol. Septocidi 200.0 DS Outdoor. For processing the surgical field # Rp.: Pul. Tricillini 60.0 DS External for powdering a wound. Continuation of treatment. In the following days, carry out therapeutic measures, describe the dynamics of the course of the disease and therapeutic measures, if they differ from the initial ones. When the animal recovers, the diary writes: Exodus: recovery.	
08/05/2016	SPK "Olgovskoe" Lactic complex	Under the guidance of a veterinarian, he examined and treated cow No. 4133 of a black-and-white breed at the age of 6 years. Anamnesis: the cow is kept in a standard cowshed for 200 heads, the method of keeping is tethered, exercise is daily, the diet includes: haylage, straw and flour from a grain mixture. According to the milkmaid, it was established that swelling in the area of the lateral surface of the thigh was formed after a walk. Symptoms: T-38.6°C, P-64 beats/min, D-24 respiration. strokes/min, R_5-eight. The general condition is satisfactory, appetite is reduced. The act of urination and defecation is not disturbed. A clinical examination in the area of the right thigh revealed a limited (17 x 25 cm), elastic, painful, with a local increase in temperature, a swelling of a spherical shape. During a diagnostic puncture, blood is released from the needle.	

		Diagnosis: Hematoma in the right thigh (Hematoma). **Treatment: Prepared the surgical field (removed the hairline, treated the skin with 5% alcohol solution of iodine). Using a needle in the lower part of the hematoma, he performed a diagnostic puncture. A solution of benzylpenicillin 1,000,000 BD and streptomycin sulfate 1 g in 10 ml of a 0.5% solution of novocaine was introduced into the hematoma cavity.**	
one	**2**	**3**	**4**
		Rp.: Sol. Iodi spirituosae 5% -10.0 **DS Outdoor. For processing the surgical field of the puncture site.** **#** **Rp.: Benzilpenicillini sodium 1000000 ED** **Streptomicini sulfati 1.0** **MDS For insertion into the hematoma cavity** **#** **Rp.: Sol. Novocaini steril. 0.5% - 20 ml pro injectionibus DS To dilute the antibiotic.** **Continuation of treatment. In the following days, carry out therapeutic measures, describe the dynamics of the course of the disease and therapeutic measures, if they differ from the initial ones. When the animal recovers, the diary writes:** **Exodus: recovery.**	
Toxicology			
08/01/16	**SPK "Olgovskoe" MTC "Olgovo"**	**Under the guidance of a veterinarian, he examined and treated cow No. 3746, a black-and-white breed, at the age of 6 years.** **Anamnesis: the cow is kept in a typical barn for 200 heads, the method of keeping is tethered, exercise is daily, the diet includes: green mass and flour from grain mixture. According to the milkmaid, it was established that the cow has no appetite, general depression, thirst, increased urination, abundant discharge from the oral and nasal cavities.** **Symptoms: T-38.6º, P-84 beats/min, D-32 respiration. bits/min, R5 - 2. The general condition is satisfactory, there is no appetite. Clinical examination revealed general depression, lack of appetite, thirst, increased urination.**	

		bleeding, copious discharge from the oral and nasal cavities, bluish-brown visible mucous membranes, tachycardia, rapid breathing, hypotension, pain in the abdominal wall, diarrhea, convulsions. **In a laboratory study, an increased content of nitrites in the green mass was established.** **Diagnosis. Nitrite poisoning.**	
one	**2**	**3**	**4**
		Treatment. To restore methemoglobin, 100 ml of a 1% solution of methylene blue was intravenously injected into hemoglobin. Intravenously introduced 200 ml of 40% glucose solution with the addition of 40 ml of 5% ascorbic acid solution. To speed up the recovery of nitrites, 3 liters of a 10% sugar solution with the addition of 1% acetic acid were introduced inside. To maintain cardiac activity, 10 ml of cordiamine intramuscularly. **Rp.: Solutionis Methyleni coerulei** **sterilisatae 1% - 100.0** **Da. signa. Intravenous. For one introduction.** **#** **Rp.: Solutionis Glucosi sterilisatae** **40% - 200.0** **Da. signa. Intravenous. For one introduction.** **#** **Rp.: Solutionis Acidi ascorbinici 5% - 10.0** **D. td No. 4 in ampullis** **signa. Intravenous. For one introduction.** **#** **Rp.: Cordiamini 2.0** **D. td No. 5 in ampullis** **signa. Intravenous. For one introduction.** **Treatment continued.** **Under the guidance of a veterinarian, he examined and treated 10 piglets at the age of 4 months.** **Anamnesis: piglets are kept in a standard room, feeding - concentrated feed SK-61. The piglets noted general arousal, thirst,**	

		profuse salivation, vomiting, diarrhea. Symptoms: During the examination, the piglets noted thirst, profuse salivation, general agitation, vomiting, gnashing of teeth, diarrhea, weakening of vision, animals strive forward, make circular movements, excitation is replaced by depression, respiratory and cardiac depression, paresis, paralysis. - Lychee of the extremities, cyanosis of the ears, dewlap, loss of general sensitivity.	
one	2	3	4
		In a laboratory study of compound feed, an increased content of sodium chloride was established. Diagnosis. Sodium chloride poisoning. Treatment consists in saturating the body with water. Watered piglets often, but in small portions. Intramuscularly injected 10 ml of 10% solution of calcium gluconate. Inside, to reduce the absorption of sodium chloride in the form of a suspension, magnesium oxide was prescribed 2.0 2 times a day. To maintain cardiac activity, a 10% solution of sulfocamphocaine, 1 ml per injection. Rp.: Sol. Calcii gluconatis 10%-10ml D. td 10 in ampullis signa. Intramuscular. 10 ml per injection 2 times a day. # Rp.: Magnesii oxydi 40.0 Aquae destillatae ad 400.0 Misce, fiat suspensio Da. signa. Internal. 1 tablespoon 2 times a day. Shake before use. # Rp.: Sol. Sulfocamphocaini 10%-2 ml D. td 5 in ampullis signa. Intramuscular. 1 ml per injection once a day. Treatment continued. For chemical-toxicological studies, the contents of the stomach were taken in the amount of 0.5 kg. To do this, at the autopsy, after examining the internal organs, he tied up the esophagus and 12-p. with ligatures. intestine near the wall of the stomach (two bandages in two places) and cut between the bandages	

		kami. The stomach was taken out and put in a clean dish, opened along the front wall. **The contents of the stomach were preliminarily (not removed from the stomach) mixed, after which, carefully, so as not to contaminate it, a part of the contents was taken away.**	
one	**2**	**3**	**4**
		He packed the material in a clean one-liter glass jar, closed it tightly with a lid, wrapped the jar over the lid with clean parchment paper, tied it with strong twine and sealed it with a wax seal. I attached a label to the end of the twine. On the label he indicated: the contents of the stomach, gross weight, type of animal, date of death and autopsy, jar number. He also took a sample of compound feed from the feeder in the amount of 0.7 kg, placed it in a new plastic bag. Packed and issued for shipment to the laboratory. Compiled accompanying.	
02.08.16	**SPK "Olgovskoye"**	**He was engaged in the study of plants of toxicological interest that grow on the territory of the farm. On pastures there are: caustic buttercup, creeping ranunculus, sorrel, horsetail, medicinal sweet clover, spotted hemlock;** **on hayfields: horsetail, common tansy, etc.;** **in the fields and gardens: rapeseed, blue cornflower, field mustard, colza, wild radish, horsetail, field yarutka, etc .;** **on wastelands: black henbane, Sosnovsky's cow parsnip, common dope, bitter wormwood, great celandine, etc.** ***Wormwood* Artemisia absinthium. Herbaceous perennial plant. Stems up to 1.2 m high with alternate petiolate leaves. The plant is covered with white fluff. Panicle inflorescence, flowers small, greenish-yellow. It occurs everywhere: along fields and roadsides, in fields, weedy places, kitchen gardens, etc. It contains essential oils and a large amount of bitter alkaloids, which give the plant a bitter taste.** ***Henbane black* - Hyoscyamus niger. Biennial herbaceous plant covered with sticky down; the stem is branched, 30-150 cm high. The leaves are large, notched-toothed, the lower ones are on petioles, stem-sessile, semi-stalked. Flowers**	

		large, dirty yellow with purple streaks. Seeds are fine-meshed, rounded, brownish-gray in color. Propagated by seeds. Distributed all over the place. Grows in abandoned fields, vegetable gardens, wastelands, roadsides, etc. Henbane contains alkaloids: hyoscyamine, atropine, scopolamine (hyoscine). They accumulate in all parts of the plant (from 0.2 to 0.5%). All alkaloids are very stable and do not lose their activity during drying, ensiling, laying haylage.	