Ministry of Agriculture of the Russian Federation
Federal State Budgetary Educational Institution of higher education
«Saint Petersburg State University of
Veterinary Medicine»

APPROVED BY
Vice-Rector
for educational work
and youth policy
A.A. Sukhinin
May 6, 2024

Department of Epizootiology named after V. P. Urban

WORKING PROGRAM
for the discipline
«RISKS ASSESSMENT AND MANAGEMENT IN ZOONOSES»
Level of higher education
SPECIALITY
Specialty 36.05.01 Veterinary Medicine
Full-time education
Education starts in 2024

Considered and accepted
at the meeting of the department
May 2, 2024.
Protocol № 12/1
Head of the Department of Epizootiology
Candidate of veterinary science, docent
L.C. Fogel

Saint Petersburg

2024

1. AIMS AND OBJECTIVES OF THE DISCIPLINE

The purpose of mastering the discipline is to develop students' knowledge about the epizootological patterns of the occurrence, manifestation and spread of infectious animal diseases, zoonoses; means and methods of prevention and control, skills and abilities on the organization of veterinary activities, forms and methods of organizing the work of veterinary specialists in assessing and managing risks for zoonoses, economics of veterinary affairs, methods and techniques of veterinary statistics, organization of state veterinary supervision in livestock farming, at processing industry enterprises, in transport, at state borders.

The objectives of the discipline are:

- in-depth familiarization of students with risk assessment and management of zoonotic diseases; measures to protect the territory of the Russian Federation from the introduction of infectious diseases from foreign countries, to protect the population from diseases common to humans and animals;
- in-depth familiarization of students with the organization and monitoring of the occurrence and spread of infectious diseases; assessing the economic effectiveness of veterinary measures; assessment and forecast of possible damages, costs of veterinary measures in the event of zoonoses; veterinary supplies and logistics for veterinary activities; long-term planning of the work of veterinary departments; organization of work in veterinary institutions and maintenance of veterinary documentation;
- in-depth familiarization of students with zoonoses and measures for the prevention and elimination of zoonoses; readiness to organize and control the implementation of mass diagnostic, treatment and preventive measures aimed at early detection and prevention of the spread of zoonoses.

2. LIST OF PLANNED LEARNING OUTCOMES OF THE DISCIPLINE (MODULE), CORRELATED WITH THE PLANNED LEARNING OUTCOMES OF THE EDUCATIONAL PROGRAM

As a result of mastering the discipline, the student is prepared for the following types of activities, in accordance with the educational standard FGOS VO 36.05.01 «Veterinary Medicine».

Type of professional activity:

13 Agriculture

Competencies of the student, formed as a result of mastering the discipline.

The study of the discipline should form the following **competences:**

A) Universal competencies (UC):

UC-1 To be able to critically analyze problem situations based on a systematic approach and develops an action strategy

UC-1 ID-1 To know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis

UC-1 ID-2 To be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies

UC-1 ID-3 To be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems using adequate methods for solving them; demonstrating value judgments in solving problematic professional situations

B) Professional competencies (PC):

Type of professional tasks: medical

PC-11 Anti-epizootic measures annual plan development, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures

PC-11 ID-1 To be able to collect and analyze information, including veterinary statistics, necessary for planning preventive anti-epizootic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures

PC-11 ID-2 To know methods of collecting and analyzing information for veterinary planning, including using information databases

PC-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-communicable animal diseases, the plan of veterinary and sanitary measures

PC-12 ID-2 To be able to assess the impact of the conditions of keeping and feeding animals on their health as part of the implementation of action plans for the prevention of non-communicable animal diseases

PC-12 ID-3 To be able to carry out veterinary quality control and procurement of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of non-communicable animal diseases

PC-12 ID-4 To know the recommended forms of a plan of anti-epizootic measures, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures

PC-12 ID-5 To know the procedure for conducting internal control of the veterinary and sanitary condition of the facility and the microclimate of livestock premises, using digital equipment

PC-13 Organization of measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the plan of anti-epizootic measures

PC-13 ID-1 To know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-14 Organization of prophylactic immunizations (vaccinations), medical and preventive treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures to prevent animal diseases in order to improve them

PC-14 ID-1 To be able to analyze the effectiveness of preventive measures and their implementation, including the use of digital technologies

PC-16 Organization of disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them

PC-16 ID-1 To be able to evaluate the effectiveness of preventive measures taken and methods of their implementation, including using digital technologies

PC-16 ID-2 To know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine

3. PLACE OF THE DISCIPLINE IN THE STRUCTURE OF MPEP

Discipline B1.V.18 "Risks assessment and management in zoonoses" is a part formed by participants in educational relations in the specialty 36.05.01 "Veterinary Medicine" (specialty level).

The discipline is mastered in the 10th semester of full-time study.

When learning the discipline "Risks assessment and management in zoonoses", the knowledge and skills acquired by students in mastering the disciplines - Biology with basic ecology, Animal Anatomy, Latin, Cytology, histology and embryology, Pathological physiology, Veterinary pharmacology, Clinical diagnostics are used. The discipline "Risks assessment and management for zoonoses" is the basic one on which most subsequent disciplines are built, such as:

1. Pathological anatomy and forensic veterinary examination
2. Epizootology and infectious diseases
3. Parasitology.
4. Veterinary and sanitary examination
5. Organization of veterinary work

4. SCOPE OF THE DISCIPLINE «RISKS ASSESSMENT AND MANAGEMENT IN ZOONOSES»

4.1. Scope of the disipline «Risks assessment and management in zoonoses» for full-time study

Type of study work	Total hours	Semester
		A
Auditorium classes (total)	**39**	**39**
These include:		
Lectures, including interactive forms	18	18
Practical Classes (PC), including interactive forms	21	21
Practical Training (PT)	6	6
Independent work (total)	**63**	**63**
Type of intermediate certification (credit, exam, course work)	Credit -A	Credit -A
Total labor intensity hours / credit units	**108/3**	**108/3**

5. CONTENT OF THE DISCIPLINE «RISKS ASSESSMENT AND MANAGEMENT IN ZOONOSES»

5.1. Content of the discipline «Risks assessment and management in zoonoses» for full-time study

№	Title	Formative competences	Semester	Types of academic work, including independent work of students and labor intensity (in hours)			
				L	PC	PT	IW
1	**Relevance of studying the discipline "Risks assessment and management in zoonoses".** Epizootological aspects of infection and infectious process. Epizootic process and regularities of its development.	**UC-1** To be able to critically analyze problem situations based on a systematic approach and develops an action strategy UC-1 ID-1 To know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis UC-1 ID-2 To be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies UC-1 ID-3 To be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems using adequate methods for solving them; demonstrating value judgments in solving problematic professional situations	A	4	4	1	12
2	**Basic characteristics of zoonotic infections. Causes and risk factors. Forms of disease. Groups of zoonotic infections.** Epizootic focus and natural focus of infectious diseases (rabies, leptospirosis, listeriosis, yersiniosis)	**UC-1** To be able to critically analyze problem situations based on a systematic approach and develops an action strategy UC-1 ID-1 To know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis UC-1 ID-2 To be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies UC-1 ID-3 To be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems using adequate methods for solving them; demonstrating value judgments in solving problematic professional situations	A	4	4	1	12
3	**Risks assessment and management in zoonoses.** Antiepizootic measures (anthrax, tuberculosis, brucellosis, rabies, leptospirosis, listeriosis,	**PC-11** Anti-epizootic measures annual plan development, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures PC-11 ID-1 To be able to collect and analyze information, including veterinary statistics, necessary for planning preventive anti-epizootic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures	A	4	4	1	12

	pasteurellosis, dermatomycoses, salmonellosis, clostridiosis, spongiform encephalopathy). Animal identification and tracing systems.	PC-11 ID-2 To know methods of collecting and analyzing information for veterinary planning, including using information databases **PC-12** Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-communicable animal diseases, the plan of veterinary and sanitary measures PC-12 ID-2 To be able to assess the impact of the conditions of keeping and feeding animals on their health as part of the implementation of action plans for the prevention of non-communicable animal diseases PC-12 ID-3 To be able to carry out veterinary quality control and procurement of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of non-communicable animal diseases PC-12 ID-4 To know the recommended forms of a plan of anti-epizootic measures, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures PC-12 ID-5 To know the procedure for conducting internal control of the veterinary and sanitary condition of the facility and the microclimate of livestock premises, using digital equipment **PC-13** Organization of measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the plan of anti-epizootic measures PC-13 ID-1 To know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine **PC-14** Organization of prophylactic immunizations (vaccinations), medical and preventive treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures to prevent animal diseases in order to improve them PC-14 ID-1 To be able to analyze the effectiveness of preventive measures and their implementation, including the use of digital technologies					
4	**Symptoms. Diagnosis. Prognosis.** Diagnostic methods for infectious diseases	**UC-1** To be able to critically analyze problem situations based on a systematic approach and develops an action strategy UC-1 ID-1 To know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis	**A**	**4**	**4**	**1**	**12**

	(anthrax, tuberculosis, brucellosis, rabies, leptospirosis, listeriosis, pasteurellosis, dermatomycoses, salmonellosis, clostridiosis, spongiform encephalopathy).	UC-1 ID-2 To be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies UC-1 ID-3 To be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems using adequate methods for solving them; demonstrating value judgments in solving problematic professional situations					
5	**Measures to prevent and eliminate zoonoses** General and specific prevention of infectious diseases (anthrax, tuberculosis, brucellosis, rabies, leptospirosis, listeriosis, pasteurellosis, dermatomycoses, salmonellosis, clostridiosis, spongiform encephalopathy). Disinfection.	**PC-14** Organization of prophylactic immunizations (vaccinations), medical and preventive treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures to prevent animal diseases in order to improve them PC-14 ID-1 To be able to analyze the effectiveness of preventive measures and their implementation, including the use of digital technologies **PC-16** Organization of disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them PC-16 ID-1 To be able to evaluate the effectiveness of preventive measures taken and methods of their implementation, including using digital technologies PC-16 ID-2 To know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine	**A**	**2**	**5**	**2**	**15**
Total fot A semester				**18**	**21**	**6**	**63**

6. List of educational and methodical support for independent work of students in the discipline «Risks assessment and management in zoonoses»

6.1. Methodological instructions for independent work

1. Methodological recommendations for the performance of course work in the discipline "Epizootology" / compiled by: V. A. Kuzmin [and others]; Ministry of Agriculture of the Russian Federation, SPbSUVM. - St. Petersburg, 2014. - 18 c. - Text (visual): direct.
2. Sanitary cleaning of the area in the system of anti-epizootic measures: educational and methodical manual / author-composer: O. R. Polyakova [et al]; Ministry of Agriculture of the Russian Federation, SPbSUVM. - St. Petersburg: Publishing house SPbSUVM, 2020. - 28 c. - URL: https://clck.ru/frFSr (access date: 27.04.24). - Access mode: for authorized users of the EB SPbSUVM.
3. Disinfection in the system of anti-epizootic measures: teaching manual / O.R. Polyakova, V.A. Kuzmin, Y.Y. Danko [et al] ; Ministry of Agriculture of the Russian Federation, SPbSAVM. - St. Petersburg: Izd-vo SPbSAVM, 2016. - 72 p.- URL: https://clck.ru/eMeRo (access date: 27.04.24). - Access mode: for authorized users of the EB SPbGAVM.
4. Educational and methodical manual on the discipline "Epizootology and infectious diseases": Disinsection in the system of anti-epizootic measures / author.-comp: O. R. Polyakova [and others]; Ministry of Agriculture of the Russian Federation, SPbSAVM. - St. Petersburg : FGBOU VO SPbSAVM, 2019. - 14 c. - UR: https://clck.ru/frDAg (access date: 27.04.24). - Access mode: for authorized users of the EB SPbSUVM.
5. Deratization in the system of anti-epizootic measures: a manual / O.R. Polyakova, V.A. Kuzmin, Y.Y. Danko [et al] ; Ministry of Agriculture of the Russian Federation, SPbSAVM. - St. Petersburg: SPbSAVM Publishing House, 2016. - 17 c. - URL: https://clck.ru/frDmy (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

6.2. Literature for independent work

1. Cattle: maintenance, feeding, diseases: diagnosis and treatment: [recommended by UMO RF]: textbook for university students / A. F. Kuznetsov, A. A. Stekolnikov, I. D. Alemaykin [et al.]; ed. by A. F. Kuznetsov. - 2nd ed., supplement - St. Petersburg: Lan, 2016. - 752 c. - (Textbooks for universities. Special literature). - Text (visual): direct.
2. Reference book on veterinary medicine: a textbook / A.A. Stekolnikov, A.F. Kuznetsov, A.A. Aliev [et al.]; ed. by A.A. Stekolnikov and A.F. Kuznetsov. - St. Petersburg: Prospect Nauki, 2011. - 543 c. - Text (visual): immediate.
3. OIE list and transboundary animal infections: a monograph / V. V. Makarov, V. A. Rude, K. N. Gruzdev, O. I. Sukharev. - Vladimir: VIT-print, 2012. - 160 c. - Text (visual): direct.
4. Makarov, V.V. Sketches of the history of the fight against infectious diseases: textbook; supplemented by the Ministry of Agriculture of the Russian Federation. Ч. 1: From the ancient world to the present / Makarov V.V., Rude V.A. - Vladimir: VIT-print, 2013. - 230 c. - Text (visual): direct.
5. Rabies: etiology, epizootology, diagnostics: textbook / A. V. Ivanov, N. A. Khismatullina, A. N. Chernov, A. M. Gulukin. - Moscow: Kolos, 2010. - 54 c. - Text (visual): direct.
6. Krasikov, A. P. Course of lectures on general epizootology: textbook / A. P. Krasikov, I. G. Trofimov. - 2nd ed. - Omsk: Omsk GAU, 2014. - 117 c. - URL: https://e.lanbook.com/book/58821 (access date: 27.04.24). - Access mode: for authorized users of EBS "Lan".
7. Sanitary cleaning of the area in the system of anti-epizootic measures: educational and methodical manual / author-composer: O. R. Polyakova [et al]; Ministry of Agriculture of the

Russian Federation, SPbSUVM. - St. Petersburg: SPbSUVM Publishing House, 2020. - 28 c. - URL: https://clck.ru/frFSr (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

8. Smirnov, A.M. Veterinary and sanitary measures at African swine fever : monograph / A.M. Smirnov, M.P. Butko. - Moscow: NIPKTS Voskhod-A, 2013. - 452 c. - Text (visual): direct.

9. Methodological recommendations for the recovery of reindeer breeding farms from brucellosis of reindeer / author: L. S. Vogel, A. S. Kisil, V. V. Veretennikov, K. A. Laishev [and others]; Ministry of Agriculture of the Russian Federation, SPbSUVM, NWCPPO-SPb FIC RAS, NIISKh and EA FKNTs SB RAS. - St. Petersburg: FGBOU VO SPbSUVM, 2021. - 46 c. - URL: https://clck.ru/32bfrG (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

10. Methodical recommendations on disinfection of objects of veterinary supervision in a poultry farm / author: E. D. Javadov, O. F. Khokhlachev, O. B. Novikova; Ministry of Agriculture of the Russian Federation, SPbSUVM. - St. Petersburg: FGBOU VO SPbSUVM, 2021. - 25 c. - URL: https://clck.ru/32bfyG (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

7. List of basic and additional literature necessary for mastering the discipline

a) basic literature:

1. Epizootology and infectious diseases: textbook for students of higher agricultural educational institutions specializing in "Veterinary" / A. A. Konopatkin, B. T. Artemov, I. A. Bakulov [et al.]; ed. by A. A. Konopatkin. - 2nd ed., revision and supplement - Moscow: Kolos, 1993. - 688 c. - (Textbooks and manuals for students of higher educational institutions). - URL: https://clck.ru/eMj6p (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

2. Practicum on epizootology and infectious diseases with veterinary sanitation / V. P. Urban, M. A. Safin, A. A. Sidorchuk, M. V. Kharitonov. - Moscow: KolosS, 2004. - 216 p.: il. - (Textbooks and manuals for students of higher educational institutions). - Text (visual): direct.

3. Sidorchuk, A. A. General epizootology: textbook for universities / A. A. Sidorchuk, V. A. Kuzmin, S. V. Alekseeva. - 2nd ed. - St. Petersburg: Lan, 2021. - 248 c. - URL: https://e.lanbook.com/book/156931 (access date: 27.04.24). - Access mode: for authorized users of EBS "Lan".

b) additional literature:

1. Epizootology with microbiology: textbook for universities / A. S. Aliev, Y. Y. Danko, I. D. Yeschenko [et al.]; Edited by V. A. Kuzmin, A. V. Svyatkovsky. - 6th, ster. - St. Petersburg: Lan, 2021. - 432 c. - URL: https://e.lanbook.com/book/162384 (access date: 27.04.24). - Access mode: for authorized users of EBS "Lan".

2. Basics of planning and control of veterinary measures: educational and methodical manual / N.M. Kalishin, A.I. Shnur, I.I., N.N. Zubareva ; Ministry of Agriculture of the Russian Federation, SPbSUVM. - St. Petersburg: Publishing house SPbSUVM, 2008. - 67 c. URL: https://clck.ru/Vf5i8 (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

3. Epizootologic method of research: textbook / V. V. Makarov, A. V. Svyatkovsky, V. A. Kuzmin, O. I. Sukharev. - St. Petersburg: Lan, 2009. - 224 c. - URL: https://e.lanbook.com/book/249 (access date: 27.04.24). - Access mode: for authorized users of EBS "Lan".

4. Epizootologic monitoring of infectious diseases of animals. Modern geoinformation technologies in epizootology and epidemiology: methodical recommendations / compiled by: Y. Y. Danko [and others]; Ministry of Agriculture of the Russian Federation, SPbSUVM. - St.

Petersburg: SPbSUVM, 2015. - 48 c. - URL: https://clck.ru/frCLT (access date: 27.04.24). - Access mode: for authorized users of EB SPbSUVM.

5. Fundamentals of active immunoprophylaxis of infectious diseases of animals: educational and methodical manual / comp: O. R. Polyakova [et al]; SPbSUVM. - St. Petersburg: SPbSUVM, 2014. - 30 c. - URL: https://clck.ru/eMew9 (access date: 27.04.24). - Access mode: for authorized users of the EB SPbSUVM.

8. Resources list from information and telecommunication network "Internet" necessary for mastering the discipline

To prepare for laboratory classes and perform independent work, students can use the following Internet resources:

1. www.mgavm.ru - K.I. Skryabin MGAVMiB information site
2. http://www.fsvps.ru/ - official website of Rosselkhoznadzor
3. http://www.oie.int/ - official website of the World Organization for Animal Health
4. https://meduniver.com/ - medical information website.

Электронно-библиотечные системы:

1. EBS «SPbGUVM»
2. EBS "Publishers "Lan"
3. "ConsultantPlus" legal reference system
4. Scientific electronic library ELIBRARY.RU
5. Russian Science Network
6. Web of Science database of international scientific citation indices
7. E-books by Prospect Nauki Publishing House http://prospektnauki.ru/ebooks/
8. EBS of «Kvadro» Publishing House "Elibrika" https://elibrica.com/

9. Methodological instructions for students on mastering the discipline

Methodological recommendations for students are a set of recommendations and explanations that allow the student to optimally organize the process of studying the discipline.

The content of methodological recommendations, as a rule, may include:

- Tips for planning and organizing the time needed to study the discipline. A description of the student's sequence of activities, or "learning scenario".

Morning time is the most fruitful time for study work (from 8-14 hours), followed by afternoon (from 16-19 hours) and evening (from 20-24 hours). The most difficult material is recommended to be studied at the beginning of each time interval after rest. After 1.5 hours of work a break is necessary (10-15 minutes), after 4 hours of work the break should be 1 hour. Part of the scientific organization of work is mastering the technique of mental work. Normally, a student should devote about 10 hours a day to studying (6 hours at university, 4 hours at home).

- Recommendations for working on the lecture material

In preparing for the lecture, the student is advised to:

1) review the notes of the previous lecture and recollect the previously studied material;

2) review upcoming material for a future lecture(it is also useful);

3) if you have been assigned to independently study some fragments of the topic of the previous lecture, you should do it without delay;

4) psych yourself up for the lecture.

This work includes two main stages: lecture notes and subsequent work on the lecture material.

Outlining means making an outline, i.e. a brief written summary of the content of something (an oral presentation - speech, lecture, report, etc. or a written source - a document, article, book, etc.).

The method of work in outlining oral speeches differs significantly from the method of work in outlining written sources.

When taking notes from written sources, the student has the opportunity to repeatedly read the necessary passage of text, reflect on it, highlight the main thoughts of the author, briefly formulate them and then write them down. If necessary, he/she can note his/her attitude to this point of view. When listening to a lecture, the student should postpone most of the complex of the above-mentioned works for another time, trying to use every minute to record the lecture, not to comprehend it - there is no time left for that. Therefore, when taking notes on the lecture, it is recommended to separate fields for subsequent notes in addition to the lecture notes on each page.

Having written down the lecture or made its outline, one should not leave the work on the lecture material until the beginning of preparation for the credit. It is necessary to do as early as possible the work that accompanies the outlining of written sources and that could not be done during the recording of the lecture - to read their notes, deciphering certain abbreviations, to analyze the text, to establish logical links between its elements, in some cases to show them graphically, to highlight the main ideas, to note the issues that require additional processing, in particular, consultation with the teacher.

When working on the text of the lecture, the student should pay special attention to the problematic issues posed by the instructor during the lecture, as well as to his assignments and recommendations.

For each lecture, practical training and laboratory work, the number, topic, list of issues covered, volume in hours and references to the recommended literature should be given. For classes conducted in interactive forms, their organizational form should be indicated: computer simulation, business or role-playing game, case study, etc.

- Recommendations for preparation for practical training

Practical (seminar) classes form an important part of students' professional training. The main purpose of practical (seminar) classes is to form students' analytical, creative thinking by acquiring practical skills. Also practical classes are held in order to deepen and consolidate knowledge gained in lectures and in the process of independent work on normative documents, educational and scientific literature. In preparation for a practical lesson for students should study or repeat the theoretical material on a given topic.

When preparing for the practical training, students are recommended to follow the algorithm;

1) familiarize themselves with the plan of the upcoming class;

2) Work through the literature sources that have been recommended and familiarize yourself with the introductory notes to the relevant sections.

Methodical instructions for practical (seminar) classes in the discipline along with the working program and the schedule of the educational process are among the methodical documents that determine the level of organization and quality of the educational process.

The content of practical (seminar) classes is fixed in the working training programs of disciplines in the sections "List of topics of practical (seminar) classes".

The most important component of any form of practical classes are assignments. The basis of the assignment is an example, which is analyzed from the standpoint of the theory developed in the lecture. As a rule, the main attention is paid to the formation of specific skills, skills, which determines the content of students' activities - problem solving, laboratory work, clarification of categories and concepts of science, which are a prerequisite for proper thinking and speech.

Practical (seminar) classes fulfill the following tasks:

- stimulate regular study of recommended literature as well as attentiveness to the lecture course;

- consolidate the knowledge gained in the course of lecture training and independent work on literature;

- expand the scope of professionally relevant knowledge, skills and abilities;
- allow to check the correctness of previously acquired knowledge;
- instill independent thinking skills, oral presentation skills;
- promote fluency in terminology;
- provide the instructor with an opportunity to systematically monitor the level of students' independent work.

Methodical instructions for practical (seminar) classes in the discipline should be oriented on modern conditions of economic management, current regulatory documents, advanced technologies, on the latest achievements of science, technology and practice, on modern ideas about those or other phenomena of the studied reality.

• Recommendations for working with the literature.

Work with literature is an important stage of independent work of the student to master the subject, contributing not only to the consolidation of knowledge, but also to the expansion of horizons, mental abilities, memory, the ability to think, state and confirm their hypotheses and ideas. In addition, the skills of research work necessary for further professional activity are developed.

When starting to study the literature on the topic, it is necessary to make outlines, extracts, notes. It is obligatory to take notes on the works of theorists, which allow you to comprehend the theoretical basis of the study. Otherwise, you can limit yourself to extracts from the studied sources. All extracts, quotations must necessarily have an accurate "return address" (author, title of the work, year of publication, page, etc.). It is desirable to write the abbreviated name of the question to which the extract or quotation refers. In addition, it is necessary to learn to immediately make a card index of special literature and publications of sources, both proposed by the teacher and identified independently, as well as to refer to bibliographic directories, annals of journal articles, book annals, abstract journals. In this case, publications of sources (articles, book titles, etc.) to write on separate cards, which should be filled out according to the rules of bibliographic description (surname, initials of the author, title of the work. Place of publication, publishing house, year of publication, number of pages, and for journal articles - the name of the journal, year of publication, page numbers). On each card it is advisable to record the idea of the author of the book or a fact from this book only on one specific issue. If the work, even in the same paragraph or phrase, contains more judgments or facts on another issue, they should be written out on a separate card. The statement should be concise, precise, without subjective assessments. On the back of the card you can make your own notes about the book or article, its content, structure, what sources it was written on, etc.

• Explanations about working with test materials for the course, recommendations for completing homework.

Testing allows you to determine whether the actual behavior of the program corresponds to the expected behavior by performing a specially selected set of tests. A test is the fulfillment of certain conditions and actions necessary to verify the operation of the function being tested or its part. Each question in the discipline must be answered correctly by choosing one option.

• Recommendations for control work (if it is assumed by the curriculum), determining students' knowledge of the passed material by means of independent work, including theoretical tasks and several practical assignments.

• Recommendations for the implementation of coursework (if it is assumed by the curriculum), determining their thematic focus, goals and objectives of implementation, requirements for the content, scope, design and organization of the management of their preparation by departments and teachers, are carried out according to the methodological guidelines presented in the list of methodological guidelines.

10. Educational work

Within the framework of realization of the discipline the educational work is carried out for formation of modern scientific worldview and system of basic values, formation and development of spiritual and moral, civil and patriotic values, system of aesthetic and ethical knowledge and values, attitudes of tolerant consciousness in the society, formation of students' need to work as the first necessity of life, the highest value and the main way to achieve success in life, to realize the social significance of their future profession.

11. List of information technologies used in the implementation of the educational process

11.1. The use of information technology is envisaged in the educational process of the discipline:

- ✓ lecturing and conducting practical classes using multimedia;
- ✓ interactive technologies (dialog lectures, collective discussion of different approaches to solving a particular educational and professional task);
- ✓ interaction with students via e-mail;
- ✓ collaborative work in the Electronic Information and Education Environment of SPbSUVM: https://spbguvm.ru/academy/eios/

11.2. Software

List of licensed and freely distributed software, including domestically produced software

№ п/п	Name of technical and computer teaching aids recommended by sections and topics of the program	License
1	MS PowerPoint	67580828
2	LibreOffice	free software
3	OS Alt Education 8	AAO.0022.00
4	АБИС "МАРК-SQL"	02102014155
5	MS Windows 10	67580828
6	System ConsultantPlus	503/КЛ
7	Android ОС	free software

12. Material-technical base necessary for realization of educational process on discipline

Name of discipline (module), practices in accordance with the curriculum	**Name of special rooms and rooms for independent work**	**Equipment of special rooms and rooms for independent work**
Risks assessment and management in zoonoses	014 (196084, St. Petersburg, 99 Moskovsky Prospekt St.) Classroom for seminars, group and individual consultations, current control and interim certification (capacity - 48 people)	*Specialized furniture:* desks, chairs, stools, blackboard. *Visual aids and teaching materials:* computer programs and multimedia presentations on epizootology and infectious diseases, educational films. Tables, posters, slides, photos. Moulages, microdrugs, biopreparations (vaccines, diagnostics, sera, etc.) Digitized computer tables for educational purposes.
	113 (196084, St. Petersburg, 99 Moskovsky Prospekt St.) Classroom for seminars, group	*Specialized furniture:* desks, chairs, stools, blackboard. *Technical means of training:*

	and individual consultations, current control and interim certification (capacity - 48 people)	projector, screen, computer. *Visual aids and teaching materials:* computer programs and multimedia presentations on epizootology and infectious diseases, educational films. Tables, posters, slides, photos. Moulages, microdrugs, biopreparations (vaccines, diagnostics, sera, etc.) Digitized computer tables for educational purposes.
	114 (196084, St. Petersburg, 99 Moskovsky Prospekt St.) Classroom for seminars, group and individual consultations, current control and interim certification (capacity - 26 persons)	*Specialized furniture:* desks, chairs, stools, blackboard. *Technical means of training:* projector, screen, computer. *Visual aids and teaching materials:* computer programs and multimedia presentations on epizootology and infectious diseases, educational films. Tables, posters, slides, photos. Moulages, microdrugs, biopreparations (vaccines, diagnostics, sera, etc.) Digitized computer tables for educational purposes.
	206 Large Reading Room (196084, St. Petersburg, 5 Chernigovskaya St.) Room for independent work	*Specialized furniture:* tables, chairs *Technical means of education:* computers with Internet connection and access to the electronic information and educational environment.
	214 Small reading room (196084, St. Petersburg, 5 Chernigovskaya St.) Room for independent work	*Specialized furniture:* tables, chairs *Technical means of education:* computers with Internet connection and access to the electronic information and educational environment.

Head of the Department of Epizootiology named after V. P. Urban Federal State Budgetary Educational Institution higher education «Saint Petersburg State University of Veterinary Medicine»,

candidate of veterinary science, docent _____ L.C. Fogel

professor, doctor of veterinary science _____ V.A. Kuzmin

Annex 1

Ministry of Agriculture of the Russian Federation
Federal State Budgetary Educational Institution
of higher education
"Saint Petersburg State University of Veterinary Medicine"

Department of Epizootiology named after V. P. Urban

Level of higher education
SPECIALIST COURSE

FUND OF ASSESMENT TOOLS
«RISKS ASSESSMENT AND MANAGEMENT IN ZOONOSES»
Level of higher education
SPECIALITY
Specialty 36.05.01 Veterinary Medicine
Full-time education

Education starts in 2024

Saint Petersburg
2024

1. PASSPORT OF THE ASSESSMENT FUND

Таблица

№	Molded competencies	Controlled sections (topics) of the discipline	Table Estimated means
1.	UC-1 Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy UK-1 ID-1 Know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis UC-1 ID-2 Be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies UC-1 ID-3 Be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems with using adequate methods to solve them; demonstrating value judgments in solving problematic professional situations	Section 1. Relevance of the study discipline "Risk Assessment and Management" for zoonoses." Epizootological aspects infections and infectious process. Epizootic process and patterns of its development.	colloquium, tests
2	Able to carry out a critical analysis of problem situations based on a systematic approach, develop action strategy UC-1 ID-1 Know the methods of critical analysis and evaluation of modern scientific achievements, basic principles critical analysis UC-1 ID-2 Be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies	Section 2. Main characteristics of zoonotic infections. Causes and risk factors. Forms of the disease. Groups of zoonotic infections. Epizootic focus and natural focality of infectious diseases (rabies, leptospirosis, listeriosis, yersiniosis).	colloquium, tests

	UC-1 ID-3 Be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems with using adequate methods to solve them; demonstrating value judgments in solving problematic professional situations		

3	PC-11 Development of an annual plan of anti-epizootic measures, plan prevention of non-contagious animal diseases, plan of veterinary and sanitary measures including ID-1 Be able to collect and analyze information, in PC-11 volume of veterinary statistics data necessary for planning preventive anti-epizootic measures, prevention of non-contagious animal diseases, veterinary and sanitary measures PC-11 ID-2 Know methods of collecting and analyzing information for veterinary planning, including using information databases PC-12 Conducting preventive clinical trials animals, checking veterinary and sanitary conditions and microclimate livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-communicable animal diseases, the plan of veterinary and sanitary measures PC-12 ID-2 Be able to assess the impact of conditions of detention and feeding animals on their health status as part of the implementation of action plans for the prevention of non-communicable animal diseases PC-12 ID-3 Be able to carry out veterinary control quality and procurement of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of non-communicable animal diseases. PC -12 ID - 4 Know the recommended forms of the anti-epizootic plan activities, a plan for the prevention of non-communicable animal diseases, a veterinary plan sanitary measures PC -12 Know the procedure for carrying out internal ID control - 5 veterinary- sanitary condition of the facility and microclimate of livestock premises, with using digital equipment PC -13 Organization of measures to protect enterprises from the introduction of infectious and invasive diseases in accordance with the plan of anti-epizootic measures PC -13 ID - 1 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine	Section 3 Zoonotic risk assessment and management . Anti-epizootic measures (anthrax, tuberculosis, brucellosis, rabies, leptospirosis, listeriosis, dermatomycosis, salmonellosis, clostridiosis, spongiform encephalopathy). Identification systems and animal tracing.	colloquium, tests

	PC -14 Organization of preventive immunizations (vaccinations) of treatment and prophylactic treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them PC -14 ID - 1 Be able to evaluate the effectiveness of preventive measures taken and methods of their implementation, in including using digital technologies		

4	UC-1 Able to carry out a critical analysis of problem situations on based on a systematic approach, develop an action strategy. UC-1 ID-1 Know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis UC-1 ID-2 Be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies UC-1 ID-3 Be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems with using adequate methods to solve them; demonstrating value judgments in solving problematic professional situations	Section 4 Symptoms Diagnostics. Forecast. Events for prevention and elimination of zoonoses. Methods for diagnosing infectious diseases (anthrax, tuberculosis, brucellosis, rabies, leptospirosis, listeriosis, dermatomycosis, salmonellosis, clostridiosis, spongiform encephalopathy).	colloquium, tests
5	PC-14 Organization of preventive immunizations (vaccinations) medical and prophylactic treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures to prevent improvement of PC-14 ID-1 Be able to evaluate the effectiveness of carried out preventive measures and methods of their implementation, including using digital technologies PC-16 Organization of disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analysis of the effectiveness of disease prevention measures animals for the purpose of their improvement PC-16 ID-1 Be able to assess the effectiveness of preventive measures taken and methods of their implementation, including using digital technologies PC-16 ID-2 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine	Section 4 Symptoms Diagnostics. Forecast. Prevention and elimination of zoonoses. General and specific prevention of infectious diseases (anthrax, tuberculosis, brucellosis, rabies, leptospirosis, listeriosis, dermatomycosis, salmonellosis, clostridiosis, spongiform encephalopathy). Disinfection.	colloquium, tests

List of assessment tools

№	**Designation evaluative means**	**Brief description of the assesment tool**	**Presentation of the assessment tool in the fund**
1.	Colloquium	A means of monitoring the assimilation of educational material of a topic, section or sections of the discipline, organized as a training session in the form of an interview between a teacher and students	Questions by topic/section disciplines
2.	Tests	System of standardized tasks, allowing automation procedure for measuring the level of knowledge and skills of a student	Test Fund tasks

1. INDICATORS AND CRITERIA FOR ASSESSING COMPETENCIES AT VARIOUS STAGES OF ITS FORMATION, DESCRIPTION OF ASSESSMENT SCALES

Planned results of competency acquaired	The level of development				Assesment tool
	Unsatisfactory	**Satisfactory**	**Good**	**Exellent**	
UC-1 Able to critically analyze problem situations based on a systematic approach and develop an action strategy					
UC-1 ID-1 Know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis	Knowledge level below minimum requirements, had the place is rude errors	Minimum acceptable knowledge level, a lot was allowed minor mistakes	Level of knowledge in volume, appropriate program preparation, admitted a few rough ones errors	Level of knowledge in volume, appropriate program preparation, without errors.	Colloquium, tests
UC-1 ID-2 Be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies	When deciding standard tasks Not demonstrated basic skills there were rough errors	All the main ones are demonstrated skills, all solved main tasks with separate insignificant shortcomings, all completed assignments in full volume	Basic skills demonstrated when deciding standard tasks with some shortcomings	Demonstrated skills in decision non-standard tasks without errors and shortcomings	Colloquium, tests
UC-1 ID-3 Be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies,	Knowledge level below minimum requirements, had the place is rude errors	Minimum acceptable knowledge level, a lot was allowed minor mistakes	Basic skills demonstrated when deciding standard tasks with some shortcomings	Level of knowledge in volume, appropriate program training for professional activities,	Colloquium, tests

identifying problems using adequate methods for solving them; demonstrating value judgments in solving problematic professional situations				without errors.	
PC-11 Development of an annual plan of anti-epizootic measures, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures					
PC-11 ID-1 Be able to collect and analyze information, including veterinary statistics data, necessary for planning preventive anti-epizootic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures	When deciding standard tasks Not demonstrated basic skills there were rough errors	All the main ones are demonstrated skills, all solved main tasks with separate insignificant shortcomings, all completed assignments in full volume	Basic skills demonstrated when deciding standard tasks with some shortcomings	Demonstrated skills in decision non-standard tasks without errors and shortcomings	Colloquium, tests
PC-11 ID-2 Know methods of collecting and analyzing information for veterinary planning, including using information databases	Knowledge level below minimum requirements, had the place is rude errors	Minimum acceptable knowledge level, a lot was allowed minor mistakes	Level of knowledge in volume, appropriate program preparation, admitted a few rough ones errors	Level of knowledge in volume, appropriate program training for professional activities, without errors.	Colloquium, tests
PC-12 Conducting preventive clinical studies of animals, checking the veterinary and sanitary condition and microclimate of livestock premises in accordance with the plan of anti-epizootic measures, the plan for the prevention of non-communicable animal diseases, the plan of veterinary and sanitary measures					
PC-12 ID-2 Be able to assess the impact of living conditions and	When deciding standard tasks	All the main ones are demonstrated	Basic skills demonstrated	Demonstrated skills in decision	Colloquium, tests

feeding of animals on their health as part of the implementation of action plans for the prevention of non-communicable animal diseases	Not demonstrated basic skills there were rough errors	skills, all solved main tasks with separate insignificant shortcomings, all completed assignments in full volume	when deciding standard tasks with some shortcomings	non-standard tasks without errors and shortcomings	
PC-12 ID-3 Be able to carry out veterinary quality control and procurement of animal feed in order to ensure their veterinary and sanitary safety as part of the implementation of action plans for the prevention of non-communicable animal diseases	When deciding standard tasks Not demonstrated basic skills there were rough errors	All the main ones are demonstrated skills, all solved main tasks with separate insignificant shortcomings, all completed assignments in full volume	Basic skills demonstrated when deciding standard tasks with some shortcomings	Demonstrated skills in decision non-standard tasks without errors and shortcomings	Colloquium, tests
PC-12 ID-4 Know the recommended forms of a plan of anti-epizootic measures, a plan for the prevention of non-communicable animal diseases, a plan of veterinary and sanitary measures	Knowledge level below minimum requirements, had the place is rude errors	Minimum acceptable knowledge level, a lot was allowed minor mistakes	Basic skills demonstrated when deciding standard tasks with some shortcomings	Level of knowledge in volume, appropriate program training for professional activities, without errors.	Colloquium, tests
PC-12 ID-5 Know the procedure for conducting internal control of the veterinary and sanitary condition of the facility and the microclimate of livestock premises, using digital	Knowledge level below minimum requirements, had the place is rude errors	Minimum acceptable knowledge level, a lot was allowed minor mistakes	Basic skills demonstrated when deciding standard tasks with some	Level of knowledge in volume, appropriate program training for	Colloquium, tests

equipment			shortcomings	professional activities, without errors.	
PC-13 Organization of measures to protect the organization from the introduction of infectious and invasive diseases in accordance with the plan of anti-epizootic measures:					
PC-13 ID-1 Know the types of measures to ensure veterinary and sanitary safety and requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine;	Basic skills were not demonstrated in solving standard tasks, and gross errors occurred	Basic skills have been demonstrated, typical problems have been solved with minor errors, all tasks have been completed, but not in full	All the basic skills have been demonstrated, all the main tasks have been solved with minor errors, all the tasks have been completed in full, but some with flaws	All basic skills have been demonstrated, all main tasks have been solved with some minor flaws, all tasks have been completed in full	Colloquium, tests
PC-14 Organize prophylactic immunizations (vaccinations), therapeutic and preventive treatments of animals in accordance with the plan of anti-epizootic measures, analyze the effectiveness of measures to prevent animal diseases in order to improve them:					
PC-14 ID-1 Know how to evaluate the effectiveness of preventive measures and methods of their implementation, including the use of digital technologies;	The level of knowledge is below the minimum requirements, gross errors have occurred	The minimum acceptable level of knowledge, many minor errors have been made	The level of knowledge corresponds to the training program, several minor errors have been made	The level of knowledge corresponds to the training program, no errors have been made	Colloquium, tests
PC-14 ID-2 Know the procedure of clinical examination of animals when planning preventive measures;	Basic skills were not demonstrated in solving standard tasks, and gross errors occurred	Basic skills have been demonstrated, typical problems have been solved with minor errors, all tasks have been completed, but not	All the basic skills have been demonstrated, all the main tasks have been solved with minor errors, all the	All basic skills have been demonstrated, all main tasks have been solved with some minor flaws, all tasks have been completed	

		in full	tasks have been completed in full, but some with flaws	in full	
PC-14 ID-3 Know the types of anti-epizootic measures and requirements for their implementation in accordance with guidelines, instructions, instructions, rules of diagnostics, prevention and treatment of animals.	When solving standard problems basic skills were not demonstrated, gross errors occurred	There is a minimum set of skills to solve standard tasks with some shortcomings	When solving standard problems basic skills were not demonstrated with some flaws	Skills were demonstrated in solving non-standard tasks without errors and flaws	
PC-16 Organize disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analyze the effectiveness of measures to prevent animal diseases in order to improve them					
PC-16 ID-1 Be able to evaluate the effectiveness of preventive measures and methods of their implementation, including with the help of end-to-end digital technologies	The level of knowledge is below the minimum requirements, gross errors have occurred	The minimum acceptable level of knowledge, many minor errors have been made	The level of knowledge corresponds to the training program, several minor errors have been made	The level of knowledge corresponds to the training program, no errors have been made	Colloquium, tests
PC-16 ID-2 Know the types of measures to ensure veterinary and sanitary safety and requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine Section	Basic skills were not demonstrated in solving standard tasks, and gross errors occurred	Basic skills have been demonstrated, typical problems have been solved with minor errors, all tasks have been completed, but not in full	All the basic skills have been demonstrated, all the main tasks have been solved with minor errors, all the tasks have been completed in full, but some with flaws	All basic skills have been demonstrated, all main tasks have been solved with some minor flaws, all tasks have been completed in full	Colloquium, tests

4. MATERIALS NECESSARY FOR THE ASSESSMENT OF KNOWLEDGE, SKILLS, ABILITIES, SKILLS AND WORK EXPERIENCE

4.1 Typical tasks for current progress control

4.1.1.Questions for the colloquium Competency Assessment Questions

UC-1 Able to critically analyze problem situations based on a systematic approach and develop an action strategy

UC-1 ID-1 Know the methods of critical analysis and evaluation of modern scientific achievements, the basic principles of critical analysis

1. Drawing up an accompanying document for taking and sending pathological material for anthrax to a veterinary laboratory.

2. Algorithm for making an intravital diagnosis of anthrax in pigs using the anthrax allergen (anthraxin).

3. Registration of an act of clinical and epizootological examination of the farm for anthrax.

4. Drawing up an act for a comprehensive laboratory study of animals and environmental objects.

UC-1 ID-2 Be able to obtain new knowledge based on analysis, synthesis, etc.; collect and summarize data on current scientific issues related to the professional field; search for information and solutions based on actions, experiment, experience, information and communication technologies

5. Algorithm for differentiating the causative agent of anthrax from saprophytic microbes closely related to B. anthracis (B. cereus, B. mycoides, B. thuringiensis, etc.), widespread in nature.

6. Algorithm for the differential diagnosis of anthrax in cows (exclude emphysematous carbuncle, malignant edema, pasteurellosis (edematous form) and piroplasmosis, non-contagious tympania, leukemia).

7. Algorithm for the differential diagnosis of anthrax in sheep (exclude bradzot, infectious enterotoxemia and piroplasmosis).

8. Algorithm for the differential diagnosis of anthrax in pigs (exclude swine erysipelas, classical swine fever, pasteurellosis).

9. Algorithm for the differential diagnosis of anthrax in horses (exclude malignant edema, hyperacute infectious anemia, piroplasmosis, petechial fever, feed poisoning).

10. Immunity and specific prevention of anthrax in animals.

11. Conditions and factors determining the stationarity, periodicity and seasonality of anthrax. 12. Pathogenetic basis of the course and forms of manifestation of anthrax in animals of different species

UC-1 ID-3 Be able to study problems of professional activity using analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identifying problems using adequate methods for solving them; demonstrating value judgments in solving problematic professional situations

13. Source of the causative agent of tuberculosis infection in susceptible species of domestic and wild animals. Reasons for maintaining the pathogen in the body in the form of L-forms.

14. Unidentified sources of the causative agent of tuberculosis. Reversion under unfavorable conditions of L-forms of mycobacteria to their original form (to the classical form of mycobacteria), the cause of tuberculosis.

15. Ways of infection of adult cattle with tuberculosis during the stall period and on pastures; pigs; dogs and cats.

16. Pathogenesis of tuberculosis.

17. Clinical manifestation of tuberculosis in various species of domestic and wild animals.

18. Principles and features of clinical-epidemiological, allergic, pathoanatomical, histological, bacteriological and biological methods for studying tuberculosis.

19. Algorithm for assessing epizootic risks (observation and analysis of the epizootic situation for particularly dangerous and socially/economically significant animal diseases in the Russian Federation and abroad; risk assessment; establishing their vectors; forecasting the development of the epizootic situation.

20. Examples and features of zoonotic conventional infections.

21. Examples and features of zoonotic transboundary infections.

22. Examples and features of zoonotic factor infections. Competency Assessment Questions

PC-11 Development of an annual plan, a plan for the prevention of non-communicable animal diseases, a plan for veterinary and sanitary measures

PC-11 ID-1 Be able to collect and analyze information, including veterinary statistics data, necessary for planning preventive anti-epizootic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures

23. Characteristics of the primary pathogenetic categories of non-communicable and infectious diseases.

24. Tasks of urban epizootology and veterinary sanitation.

25. Algorithm of actions during the period of imposition of restrictive measures.

26. Algorithm of treatment and preventive measures for non-contagious and contagious animal diseases.

27. Algorithm for veterinary and sanitary measures for non-communicable and contagious animal diseases.

28. The role of responsible persons and organizations leading the work to localize and eliminate the epizootic outbreak.

29. The tasks of veterinary sanitation in the system of anti-epizootic measures

29. Tasks of veterinary sanitation in the system of anti-epizootic measures.

30. Tasks of veterinary sanitation in the prevention of non-communicable diseases of animals.

31. The main objectives of identification of the whole animal population in large agricultural enterprises and LPH.

PC-11 ID-2 Know the methods of collecting and analysing information in veterinary planning, including the use of information databases

32. Approaches and measures of risk management in zoonoses and non-communicable diseases

33. Objectives and scope of risk management activities in non-communicable diseases and zoonoses.

34. Functions of the State Veterinary and Phytosanitary Surveillance on development of unified requirements for scientific research and other works on substantiation of technical regulations in the field of veterinary medicine.

35. Functions of the State Veterinary Surveillance on control over the implementation of technical regulations in the field of veterinary medicine, study and generalisation of the practice of their application.

36. Functions of the State Veterinary and Phytosanitary Surveillance for veterinary monitoring.

37. Functions of the State Veterinary and Phytosanitary Surveillance on the development, formation and maintenance of a unified federal database in the field of state veterinary regulation.

38. Functions of the State Veterinary and Phytosanitary Supervision on veterinary and sanitary expertise (assessment) at meat and dairy industry enterprises, markets and other facilities to prevent the sale of poor-quality food products.

39. Functions of the State Veterinary and Phytosanitary Surveillance on verification of documents (veterinary certificates, certificates, certificates, acts of inspection of farms, enterprises, protocols of autopsy of animal carcasses, etc.) to establish the well-being of farms, enterprises, settlements.

40. Functions of the State Veterinary and Phytosanitary Surveillance for checking documents during procurement, transport of animals, products of animal origin, when completing farms, export, import of animals and products.

Questions for competence assessment

PC-12 Carrying out preventive clinical examinations of animals, inspection of veterinary and sanitary condition and microclimate of animal breeding premises in accordance with the plan of anti-epizootic measures, plan of prevention of non-communicable diseases of animals, plan of veterinary and sanitary measures.

PC-12 ID-2 Be able to assess the impact of conditions of animal housing and feeding on the state of animal health within the framework of the implementation of action plans for the prevention of non-communicable animal diseases.

41.Characteristics of transmission factors related to faecal-oral transmission mechanism.

42. Objectives and areas of activity of Rosselkhoznadzor in risk management of zoonotic and non-communicable diseases.

43. Groups and factors of epizootological risks.

44. The main objectives of identification of the entire animal population in industrial agricultural enterprises, farms and LPH.

45. Objectives and areas of Rosselkhoznadzor's activity on risk management of zoonoses and non-communicable diseases in emergency situations (natural and anthropogenic/technogenic disasters).

46. The objectives and areas of Rosselkhoznadzor's activities on risk management in zoonoses and non-communicable diseases for participation in legislative interprofessional activities, in publishing and educational activities, especially in rural areas.

47. The objectives and areas of activity of Rosselkhoznadzor for risk management in zoonoses and non-communicable diseases to advise in the field of animal husbandry and veterinary medicine.

48. Main topics for the training of veterinary specialists in the field of risk management in zoonoses and non-communicable diseases in microbiology, parasitology, immunology.

49. Main topics for the training of veterinary specialists in the field of risk management in zoonoses and non-communicable diseases on zoonoses, surveillance, parasitology, immunology.

50. Main topics for the training of veterinary specialists in the field of risk management in zoonoses and non-communicable diseases on toxicology, environmental protection.

51. Main topics for the training of veterinary professionals in risk management of zoonoses and non-communicable diseases on organisational and legal issues (import/export operations and regulations, licensing in animal production, processing, veterinary medicine, quarantine, statistics and information, conventions and notifications, codes, licensing and regulations for drugs, food, consumers).

PC-12 ID-3 Be able to carry out veterinary control of quality and procurement of animal feed to ensure its veterinary and sanitary safety within the framework of implementation of action plans for prevention of non-communicable diseases of animals

52. Effective methods and schemes of animal feeding; control of safety of food raw materials of animal origin intended for human food.

53. Main topics for training of veterinary specialists in the field of risk management of zoonoses and non-communicable diseases in the conditions of

emergencies and disasters.

54. Key topics for the training of veterinary professionals in risk management of zoonotic and non-communicable diseases and the social role of animals

55. Main topics for the training of veterinary specialists in the field of risk management of zoonoses and non-communicable diseases in laboratory animal husbandry, comparative medicine.

56. Reasons why plastic ear tags are most common in modern animal husbandry for animal identification.

PC-12 ID-4 Know the recommended forms of the plan of anti-epizootic measures, plan of prevention of non-communicable diseases of animals, plan of veterinary and sanitary measures

57. Functions of the State Veterinary and Phytosanitary Surveillance to identify and establish the causes and conditions of occurrence and spread of contagious and mass non-communicable animal diseases.

58. Functions of the State Veterinary and Phytosanitary Supervision to identify measures to suppress violations of the Federal legislation in the field of veterinary medicine and to apply sanctions established by this law.

59. State Veterinary and Phytosanitary Supervision to generalise the practice of application of Federal legislation in the field of veterinary medicine, to prepare proposals for its improvement, to participate in the development of draft regulatory legal acts, Veterinary Legislation of the Russian Federation and to submit them for appropriate consideration.

60. Measures applied to owners of animals (owner of LPH) in case of refusal to identify animals, with regard to refusal of administrations of rural settlements, on the territory of which LPH is located, to issue certificates on the presence of farm animals.

61. Measures applied to owners of animals (owner of LPH) in case of refusal to identify animals, with regard to refusal to issue animal passports.

62. Measures applied to animal owners (owner of LPH) in case of refusal to identify animals, in relation to imposing a ban on the movement of livestock in the districts of the region.

PC-12 ID-5 Know the procedure of internal control of veterinary and sanitary condition of the facility and microclimate of livestock premises, using digital equipment

63. Ways to control the safety of food raw materials of animal origin, intended for human food, using methods of animal disease prevention with the use of medicines.

64. Ways of controlling the safety of food raw materials of animal origin, intended for human food, by means of methods of animal slaughter.

65. Methods of control of safety of food raw materials of animal origin, intended for human food, by means of processing of animal raw materials. 66.

66. Risk management activities of Rosselkhoznadzor for zoonoses and non-communicable diseases in laboratory animal production.

67. Rosselkhoznadzor's risk management activities in zoonoses and non-communicable diseases in preventive measures and control of animal injuries (bites, poisonings).

68. Risk management activities of Rosselkhoznadzor for zoonotic and non-communicable diseases in comparative medicine when studying diseases on animal models. 69.

69. Implementation of the Federal Programme of animal registration and traceability of animal products on the territory of the Russian Federation through the introduction of animal passportisation.

70. Implementation of the Federal Programme of Animal Accounting and Traceability of Products of Animal Origin on the Territory of the Russian Federation through the Improvement of Veterinary and Sanitary Accounting.

71. Implementation of the Federal Programme of Animal Accounting and Traceability of Products of Animal Origin on the Territory of the Russian Federation by means of real-time animal accounting.

72. Implementation of the Federal Programme of Animal Records and Traceability of Products of Animal Origin on the Territory of the Russian Federation by improving information support for breeding.

73. Implementation of the Federal Programme of Animal Records and Traceability of Products of Animal Origin on the Territory of the Russian Federation by ensuring food safety.

74. Implementation of the Federal Programme of Animal Accounting and Traceability of Products of Animal Origin on the Territory of the Russian Federation by ensuring veterinary and sanitary safety.

75. Implementation of the Federal Programme of Animal Accounting and Traceability of Products of Animal Origin on the Territory of the Russian Federation by traceability of animals and products of animal origin.

76. Implementation of the Federal Programme of animal registration and tracing of products of animal origin on the territory of the Russian Federation by tracing animals and products of animal origin

76. Implementation of the Federal Programme of animal registration and traceability of animal products on the territory of the Russian Federation by improving border control of animal movement.

Questions for competence assessment

PC-13 Organisation of measures to protect enterprises

Organisation of measures to protect enterprises from infectious and invasive diseases in accordance with the plan of anti-epizootic measures.

PC-13 ID-1 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine.

77. Leading link in the epizootic chain when carrying out preventive measures against anthrax.

78. Algorithm of actions in case of suspicion of anthrax in animals.

79. The main link in the epizootic chain to which anthrax preventive measures should be primarily directed.

80. Algorithm of actions during recovery measures in farms and private subsidiary farms of citizens in case of brucellosis.

81. Implementation of epizootological control over the well-being of the farm for tuberculosis.

82. Algorithm of actions with animals sick with spongiform encephalopathy.

83. Algorithm of differential diagnosis of tetanus (rabies, acute muscular rheumatism, feed poisoning; exclude infectious encephalomyelitis in horses, grass tetany in dairy cows).

84. Algorithm of differential diagnosis of salmonellosis in calves (escherichiosis, streptococcosis, rotavirus and coronavirus diarrhoea, adenovirus pneumoenteritis, parainfluenza).

85. Algorithm of differential diagnostics of salmonellosis in piglets (escherichiosis, streptococcosis, dysentery, plague, viral gastroenteritis).

86. Algorithm of differential diagnostics of salmonellosis in foals (escherichiosis, streptococcosis).

87. Algorithm of differential diagnostics of salmonellosis in lambs (anaerobic dysentery, eimeriosis).

88.Immunity and specific prophylaxis of anthrax in animals.

89. Pathogenetic bases of course and forms of anthrax manifestation in animals of different species.

90. Algorithm of final diagnosis of pasteurellosis (bioassay on white mice, pathomorphological changes in fallen animals, positive serological tests).

91.The most characteristic clinical signs of listeriosis.

92. Algorithm of staging a simultaneous test in tuberculosis with different allergens.

93. Algorithm for the diagnosis of brucellosis.

94. Pathogenesis of rabies infection.

95. Clinical manifestation of rabies in different species of animals.

96. Algorithm of rabies diagnosis.

97. Specific prophylaxis of rabies. Classification of anti-rabies vaccines.

98. Organisation of rabies control measures.

99. Measures to protect people from rabies infection.

100. Factors of pathogenicity of leptospires.

101. Pathogenesis of leptospirosis.

102. Clinical and epizootological diagnosis of leptospirosis.

103. Algorithm of differential diagnosis of leptospirosis in cattle and small ruminants (exclude brucellosis, piroplasmidosis, malignant catarrhal fever, campylobacteriosis, trichomonosis, salmonellosis, pneumoenteritis of mixed etiology and listeriosis).

104. Algorithm of differential diagnosis of leptospirosis in pigs (exclude brucellosis, salmonellosis, plague, rye, dysentery; diseases arising from protein, vitamin and mineral deficiencies; mycotoxicoses).

105. Algorithm of differential diagnosis of leptospirosis in horses (exclude infectious encephalomyelitis, infectious anaemia).

106. Algorithm of differential diagnostics of leptospirosis in dogs and fur-bearing animals (exclude plague - intestinal form, infectious hepatitis, parvovirus enteritis and salmonellosis, food poisoning).

107. Veterinary and sanitary, organisational and economic measures to eliminate leptospirosis.

108. Measures to protect people from leptospirosis infection.

Questions for competence assessment

PC-14 Organisation of prophylactic immunisations (vaccinations), therapeutic and prophylactic treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them.

PC-14 ID-1 Be able to assess the effectiveness of preventive measures and methods of their implementation, including the use of digital technologies.

109. Modern types of chemical (molecular) vaccines (vector, genetically engineered, subunit, DNA vaccines).

110. Epizootological significance of residual infectivity of killed vaccines.

111.Specific immunoprophylaxis of leptospirosis depending on the epizootic situation and animal species.

112. Specific immunoprophylaxis of brucellosis depending on the epizootic situation and animal species (live vaccines from B. abortus strain 19 and weakly agglutinogenic B. abortus strain 82 for vaccination of cattle; vaccine from B. melitensis strain Rev-1 for immunisation of sheep and goats).

113. Means of active specific prophylaxis of infectious diseases, the basis of which are protective antigens of a living pathogen.

114. Means of active specific prophylaxis of infectious diseases, the basis of which are protective antigens of killed corpuscular pathogen.

115. Means of active specific prophylaxis of infectious diseases, the basis of which are individual antigenic substances of protective antigens of the pathogen.

116. Features of obtaining live vaccines. Their advantages and disadvantages.

117. Features of obtaining inactivated vaccines. Their advantages and disadvantages.

118. Features of frontal vaccination of animals depending on the epizootic situation.

119. Features of ring vaccination of animals depending on the epizootic situation.

120. Methods of treatment of animals related to specific etiotropic therapy.

121. Means used for etiotropic therapy of sick animals with listeriosis.

122. Harmonisation of requirements for the keeping and use of animals with those in the EU countries for the development of international trade in animals and products of animal origin, for the purpose of registration of animals and traceability of products of animal origin in the territory of the Russian Federation.

123. Creation of an effective control system to trace all movements of the objects under the supervision of the State Veterinary Service in order to account for animals and trace products of animal origin on the territory of the Russian Federation.

Questions for competence assessment

PC-16 Organise disinfection and disinsection of livestock premises to ensure veterinary and sanitary well-being in accordance with the plan of veterinary and sanitary measures, analyse the effectiveness of measures to prevent animal diseases in order to improve them

PC-16 ID-1 Be able to assess the effectiveness of preventive measures and methods of their implementation, including the use of digital technologies.

124. Importance of disinfection and disinsection as components of anti-epizootic measures.

125. Types of disinfections. Their characterisation.

126. Rational methods of manure disinfection in case of non-spore-forming bacterial infections.

127. Optimal options for biothermal disinfection of manure.

128. Characteristics of effective disinfectants for rabies.

129. Characteristics of effective disinfectants for foot-and-mouth disease.

130. Characteristics of effective disinfectants in spongiform encephalopathy.

131. Characteristics of effective disinfectants for anthrax.

132. Characteristics of effective disinfectants for tuberculosis.

133. Characteristics of effective disinfectants for brucellosis.

134. Characteristics of effective disinfectants for leptospirosis.

135. Characteristics of effective disinfectants for listeriosis.

136. Characteristics of effective disinfectants for salmonellosis.

137. Characteristics of effective disinfectants for necrobacteriosis.

138. Characteristics of effective disinfectants in pasteurellosis.

139. Characteristics of effective disinfectants for clostridiosis.

140. Characteristics of effective disinfectants for pseudotuberculosis.

141. Characteristics of effective disinfectants in dermatomycosis.

142. Characteristics of effective disinfectants in yersiniosis.
143. Characteristics of effective disinfectants in escherichiosis.
144. Control measures used for protection in countries unfavourable for bovine spongiform encephalopathy. 145.
145. Algorithm of actions with animal carcasses in spore infections.
146. Rigid methods of sterilisation and disinfection of pathological material, utensils, instruments, overalls used in countries unfavourable for bovine spongiform encephalopathy.
147.Characteristics of disinfectants for disinsection of objects of veterinary supervision.

PC-16 ID-2 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine
legislation of the Russian Federation in the field of veterinary medicine
148. Effective disinfectants in necrobacteriosis for footbaths.
149.Characteristics of effective disinfectants acting on tetanus spores.
150. Characteristics of effective disinfectants acting on anthrax spores.
151. Control measures against sheep and goat bradzootic.
152. Algorithm of actions with manure from anthrax animals. 153.
153. Control measures in case of botulism in animals.
154. Resistance of C. botulinum spores in the external environment (in soil, at low and high temperatures).
155. The most effective disinfectants for vegetative forms of the emacarial pathogen Clostridium chauvoei.
156. Control measures for the occurrence of infectious enterotoxaemia in sheep.
157. Control measures in the occurrence of anaerobic enterotoxaemia in piglets.
158. Toxin spectrum in bradzootic sheep and goats.
159. Regulatory legal framework for surveillance, analysis, risk management of zoonoses according to OIE requirements for tightening food safety in relation to the globalisation of animal and food trade.
160. Organisation of training/retraining of Veterinary Services specialists to acquire knowledge and practical skills on surveillance, analysis, risk management of zoonoses according to OIE requirements for tightening food safety in relation to globalisation of trade in animals and food.

4.1.2.Tests on the discipline 'Risk assessment and management of zoonoses'

[40 test tasks for competence UC-1].

UC-1 Capable of critical analysis of problem situations on the basis of a systematic approach, to develop a strategy of action
UC-1 ID-1 Know the methods of critical analysis and evaluation of modern scientific achievements, basic principles of critical analysis.

1. What is necessary for risk assessment in veterinary medicine and transition of control and supervisory functions to a risk-based model?
1.Scientific development and implementation in the country of a system for surveillance of risks in veterinary activities
2. Scientific development and implementation in the country of a system for analysing risks in veterinary activity
3.Scientific development and implementation of a system for risk management in veterinary activities in the country.
4.Correct 2,3

2. What indicators are used to assess veterinary and phytosanitary risks?
1. Collaboration between specialised institutes to carry out comprehensive risk analysis conclusions for given regions, countries.
2. Collaboration between relevant institutes to provide comprehensive risk analysis conclusions for given countries. 3.
3. Co-operation between specialised institutes for execution of complex conclusions on risk analysis by types of products
4. Collaboration and information exchange between subject matter institutes to perform integrated risk analysis conclusions for assigned regions, countries and product types.

3. What parameters are used to assess epizootic risks?
1.Observation and analysis of the epizootic situation on especially dangerous and socially/economically important animal diseases in the Russian Federation and abroad. 1.
2.Risk assessment
3. Establishment of risk vectors
4. Forecast of epizootic situation development

4. What are the objectives of veterinary supervision?
1.Prevention and suppression of violations of veterinary regulations
2.Prevention of consequences related to violation of veterinary rules
3.Ensuring the production of safe products of animal origin in veterinary relation
4. Correct 1,3

5. Which of the listed infections belong to the conventional ones?
1.African swine fever, CSF, Newcastle disease.
2.Tuberculosis, brucellosis, leukaemia, RRSS
3.Rabies, leptospirosis, listeriosis.
4. All answers are correct

6. What are transboundary infections?
1. acute epizootic infections
2. A synonym of the term conventional infections
3.Infections that are of particular importance because even a single case requires international co-operation.
4. Correct 1 and 3

7. Which disease infections are categorised as transboundary?
1. Small ruminant plague, cattle nodular dermatitis, contagious pleuropneumonia of cattle
2. African swine fever, foot-and-mouth disease, rinderpest, avian influenza, Newcastle disease
3. rabies, tuberculosis, brucellosis, spongiform encephalopathy of cattle
4. Correct 1 and 3

8. How are the listed categories of infections arranged in ascending order of importance?
1. List B < list A < transboundary infections
2. List A < List B < cross-border infections
3. transboundary infections < List B < List A
4. Correct 1 and 2

9. What are exotic infections?

1.Infections that have never been reported in a given territory
2.Infections that have been introduced from outside the area
3. infections that have been reported in the area
4. Correct 1 and 3

10. What are indigenic infections?
1. Infections that occur in a given territory
2. infections that have a local source of origin
3. The semantic analogue of endogenous infections
4. All answers are correct

11. Which of the following infections are exotic infections?
1. EC, Newcastle disease, Aujeszky's disease
2. dermatophilosis, nodular dermatitis.
3. Catarrhal fever of sheep
4. Rabies

12 What are factor infections?
1.Infections in which the pathogenesis is driven by the pathogen-host interaction
2.Infections in which the pathogenesis is caused by factors of a different, different nature
3.Infections in which pathogenesis is directly caused by pathogen-host interactions
4. Correct 1 and 2

13. Which of the following infections are typical factor infections?
1. Foot and mouth disease, CSF
2. oedema, infectious atrophic rhinitis
3. Pneumoenteritis of young animals
4. tuberculosis, rabies

14. What are contagious infections?
1. diseases transmitted by direct contact with a diseased source organism.
2. All infectious diseases
3. diseases transmitted by direct contact with the reservoir of the causative agent
4. All parasitic infections

15. Which of the following distinguishes infectious diseases from non-infectious diseases?
1.Presence of complications
2. simultaneous onset
3. presence of the causative agent
4. Correct 1

16. What refers to the term 'eradication of an infectious disease'?
1.Elimination of an infectious disease within a large area (country, continent).
2. Elimination of the source of the infectious agent, its transmission mechanism, and susceptible animals.
3.High immune coverage among susceptible animals.
4.Correct 2 and 3

17. What should be considered the source of an infectious agent?
1.The place where the infectious agent resides and persists for a long period of time.

2.The environment in which the infectious agent may persist, multiply and accumulate.
3.The place of natural habitat of the pathogen where it multiplies, accumulates and is excreted into the external environment.
4.Correct 3,2

18. What control functions does the State Veterinary Surveillance perform?
1.Organisation of anti-epizootic measures: measures to prevent and eliminate foci of diseases common to humans and animals; state veterinary control at checkpoints across the state border of the Russian Federation and the protection of the territory of the Russian Federation from the introduction of contagious animal diseases from foreign countries; measures to protect the territory of the Russian Federation from the introduction of contagious animal diseases from foreign countries and control over their implementation.
2.Registration of objects of veterinary supervision and maintenance of the register of registered objects
3.Veterinary and sanitary expertise of products of animal origin
4.Correct 1,2

UC-1 ID-2 Be able to obtain new knowledge on the basis of analysis, synthesis, etc.; collect and generalise data on actual scientific problems related to the professional field; search for information and solutions on the basis of action, experiment, experience, information and communication technologies.

19. What are the risks in veterinary medicine, agriculture and processing industry?
1. In the occurrence and manifestation of biological hazards
2. In the occurrence and manifestation of chemical hazards
3. In the occurrence and manifestation of physical hazards
4. Correct 1,2

20. What are the objectives of veterinary surveillance?
1.Prevention of occurrence and spread of animal diseases
2.Protection of human health from diseases common to humans and animals
3.Protection of the territory of the country from the introduction of contagious diseases from foreign countries
4. Correct,2,3

21. Which of the following infections are not contagious?
1. tuberculosis, brucellosis, Marek's disease.
2. Anthrax, catarrhal fever of sheep
3. Salmonellosis, colibacillosis
4. Babesiosis, Lyme borreliosis

22. Which of the following infections are called aerogenic by mode of transmission?
1. CSF, colibacillosis
2. Newcastle disease, influenza, IRI
3. leptospirosis, listeriosis
4. sheep pox, foot-and-mouth disease

23. Which of the following infections are alimentary by mode of transmission of the causative agent?
1. CSF, colibacillosis

2. Newcastle disease, influenza, IRI
3. leptospiroses, listeriosis
4. sheep pox, foot and mouth disease

24. What is a sterile infection?
1. an infection with vague clinical features
2. any infection without clinical manifestation
3. an infection with clear specific clinical signs
4. Correct 1 and 2

25. What are vector-borne infections?
1. All contagious infections
2. All non-contagious infections
3.Infections transmitted through animate vectors
4. All indigenic infections

26. Which of the following infections are classified as vector-borne infections?
1. Classical swine fever, salmonellosis
2. leptospirosis, Newcastle disease and Aujeszky's disease
3. plague of carnivores, smallpox of sheep
4. Lyme borreliosis, Rift Valley fever 4.

27. What is the correct way to express the principle called the 'iceberg phenomenon'?
1. A principle that symbolises a hidden danger (risk)
2. The principle that the apparent is always only part of the real
3. A principle symbolising a clear danger (risk)
4. Correct 2 and 3

28. What is meant by the term 'virulence' of a microorganism?
1.The degree of pathogenicity of a strain of a microorganism
2.Ability to infect animals
3.The ability of a pathogen to multiply rapidly in an animal or human organism.
4.Correct 2, 3

29. Which disease is a typical example of latent infection?
1. Aujeszky's disease in adult pigs, IRI
2. leukaemia in cattle
3. slow infections in sheep
4. tuberculosis

30. Which disease is a typical example of persistent infection?
1. cattle leukaemia
2. Slow infections of sheep
3. Aleutian mink disease
4. tuberculosis

31. What ensures the continuity of the epizootic process?
1.Low level of veterinary and sanitary services
2.Interaction of the epizootic chain links
3.Insufficient coverage of animals with preventive vaccinations

4.Correct1 and 3.

32. What methods of veterinary supervision are adopted in our country?
1.Veterinary and sanitary expertise (evaluation) - a method of veterinary supervision at meat and dairy industry enterprises, markets and other facilities
2.Verification of documents (veterinary certificates, certificates, certificates, acts of inspection of farms, enterprises; protocols of autopsy of animal carcasses, etc.) - a method of establishing the welfare of farms, enterprises, settlements
3.Checking of documents at procurement, transport of animals and products of animal origin; at acquisition of farms, export, import of animals and products.
4.Correct 1 and 3

UC-1 ID-3 Possess the study of problems of professional activity with the use of analysis, synthesis and other methods of intellectual activity, including the use of information and communication technologies, identification of problems with the use of adequate methods for their solution; demonstration of evaluative judgements in solving problematic professional situations.

33. What is a manifest infection?
1. an infection with clear specific clinical features
2. an infection that manifests itself in any clinical form
3. an infection that manifests in an abbreviated clinical form.
4. Correct 2 and 3

34. What is an inapparent infection?
1. any infection without clinical manifestation
2. asymptomatic acute infection
3. asymptomatic chronic infection
4. Correct 1

35.What is a generalised infection?
1. an infection characterised by generalised (systemic) pathology and pantropism of the causative agent
2. an infection in which generalisation of the process occurs due to the spread of the pathogen through the circulating systems
3. an infection in which the pathogen spreads predominantly by lymphatic and haematogenous pathways to various organs and tissues, causing inflammation.
4. Correct 2

36. What is a latent infection?
1. A synonym for latent infection
2. very long term (lifelong) latent infection without markers
3. indefinitely latent infection with marked markers (excretion of the pathogen and seropositivity).
4. Correct 3

37. What is persistent infection?
1.Synonym for latent infection
2.Very long term (lifelong) latent infection without markers
3.Indefinitely prolonged latent infection with marked markers (excretion of pathogen and seropositivity).

4. Correct 1 and 2

38. Which of the following diseases are quarantine infections?
1.Tuberculosis
2.Emphysematous carbuncle of cattle
3.Tetanus
4.Correct 1 and 3

39. What are the main components of risk analysis recommended by the OIE?
1.Risk identification
2.Hazard identification
3.Risk notification
4.Risk management

40. What control functions does the State Veterinary Supervision fulfil?
1.Control over observance by legal entities and individuals (including individual entrepreneurs) of the Federal legislation in the field of veterinary medicine
2.Ensuring veterinary and sanitary safety of products of animal origin, anti-epizootic measures, instructions of officials carrying out state veterinary supervision
3.Accounting and analysing the facts of violation of the Federal legislation in the field of veterinary medicine, which led to the emergence and spread of contagious and mass non-communicable animal diseases.
4.Correct 1, 3

[40 test tasks for PC-11 competence].
PC-11 Development of annual plan of anti-epizootic measures, plan of prevention of non-communicable animal diseases, plan of veterinary and sanitary measures
PC-11 ID-1 Be able to collect and analyse information, including veterinary statistics data, necessary for planning preventive anti-epizootic measures, prevention of non-communicable animal diseases, veterinary and sanitary measures.
1. What should be the size of the sanitary protection zone between settlements and cattle farms, sheep breeding, poultry and fur farming enterprises, in metres?
1. 300 Cattle, cattle farms, sheep farms, poultry farms and fur farms
2. 150
3. 200
4. 250
5. 1000 bird

2. What should be the zooveterinary gaps between cattle farms, sheep farms, horse farms, pig farms and other production facilities (at least)?
1. 150 м
2. 200 м
3. 250 м
4. 300 м

3. What is the duration of the prophylactic break after the isolated section of the preventorium has been cleared of newborn calves (at least)?
1. 5 dn
2. 3 dn
3. 2 dn

4. 7 dn

4. What corresponds to the concept of 'Pathways of entry of the pathogen into the host organism'?
1. digestive and respiratory organs
2. Surface coverings
3. animate and inanimate transmission factors
4. Pathways of ecological links between the host and the external environment

5. What are the primary pathogenetic categories?
1. Damage
2. immunological reactivity
3. Pathogenesis of infectious disease
4. Reactivity

6. What are the objectives of urban epizootology and veterinary sanitation?
1.Control of animal populations
2.Elimination of stray and ownerless animals
3.Control of zoonoses (zooanthroponoses)
4. Correct 2 and 3

7. What actions are possible during the quarantine period?
1.Export of animals to a specially equipped meat processing plant
2.Removal of animals for breeding and user purposes
3.Movement of animals within the farm
4.Correct 1 and 2

8. Who heads the work on localisation and elimination of epizootic focus at especially dangerous infections and non-communicable diseases?
1.District veterinary service
2.Chief veterinary surgeon of the farm
3.Chairman of the anti-epizootic commission
4.Correct 1 and 2

9. What issues does veterinary sanitation study?
1.Zoohygienic conditions of keeping and feeding of animals
2.Obtaining livestock products of high sanitary quality
3.Mechanisms of transmission of infectious diseases common to humans and animals
4.Correct all.

10.What are the objectives of urban epizootology and veterinary sanitation?
1.Control of animal contamination of the urban environment
2.Prevention of damage from animals (accidents, etc.)
3.Health and welfare of animals
4. Correct 1 and 2

11. What are the main objectives of identifying the total number of animals in agricultural enterprises and private farms?
1. facilitation of conditions for analysing the efficiency of feeding regimes, animal housing, veterinary treatments, processing storage and sale of animal products, introduction of technical

regulation norms in the field of veterinary medicine.
2. Improvement of the system of law enforcement in the field of keeping, breeding and utilisation of animals
3. Creation of an effective control system to trace all movements of the objects under the control of the State Veterinary Service
4. Correct 1,2, 3

PC-11 ID-2 Know the methods of collecting and analysing information in veterinary planning, including the use of information databases.

12.What are the risk management approaches and measures for zoonoses?
1.Legislative measures and regulations
2.Animal registration
3. Prevention of zoonoses
4. Correct 1 and 3

13. What are the risk management approaches and measures for zoonotic diseases?
1. Epizootological and epidemiological surveillance
2. Professional training
3. Veterinary health education
4. Correct 2 and 3

14. What are the objectives and scope of zoonotic disease risk management?
1.To meet the public health needs of rural and urban settings in relation to the surveillance of zoonoses and foodborne infections.
2.Coordination and supervision of animal feeding and human nutrition.
3.Public health problems in animal production and environmental contamination by animal sources
4.Prevention and control of occupational risk in the field of livestock products processing

15. What functions does the State Veterinary Surveillance fulfil?
1.Development of unified requirements for scientific-research and other works on substantiation of technical regulations in the field of veterinary medicine
2.Control over implementation of technical regulations in the field of veterinary medicine, study and generalisation of practice of their application
3.Implementation of veterinary monitoring
4.Development, formation and maintenance of a unified federal database in the field of state veterinary regulation. 16.

16. What methods of veterinary supervision are adopted in the Russian Federation?
1.Veterinary and sanitary expertise is a method of veterinary supervision at meat and dairy industry enterprises, markets,
other facilities to prevent the realisation of substandard foodstuffs
2.Verification of veterinary certificates, certificates, certificates, acts of inspection of farms, enterprises, protocols of post-mortem examination of animal corpses, etc. - a method of establishing the well-being of farms, enterprises, settlements.
3.Verification of documents at procurement, transport of animals, products of animal origin, at acquisition of farms, export, import of animals and products
4.Correct 1,3

17. What biopreparations are diagnostic?
1.Anatoxins
2.Bacteriophages
3.Allergens
4.Correct 1,3

18. What measures are taken to contain the infection?
1.Establishment of quarantine.
2.Vaccination of animals in an epizootic centre.
3.Treatment of animals in an epizootic centre.
4.Correct 1,2

19. What measures are taken to eliminate infection?
1.Establishment of quarantine
2.Vaccination of animals in the epizootic centre
3.Vaccination of animals in the threatened zone
4. Correct 1,2

20. With the help of what preparations and by what methods the main method of lifetime diagnostics of tuberculosis is carried out?
1.Allergen - dry purified tuberculin (PPD) for mammals
2.PPD-tuberculin allergen for birds.
3.Ophthalmic test
4.Intradermal test

21. When is the diagnosis of tuberculosis considered established?
1.When a culture of the tuberculosis pathogen is isolated
2.When a positive result of a biological test is obtained
3.In cattle with a positive bioassay and detection of pathological changes typical for tuberculosis in organs or tissues.
4.Correct 1,3

22. To differentiate non-specific reactions in tuberculosis, how is a simultaneous allergy test performed?
1. mammalian tuberculin separately
2. separately with complex allergen from atypical mycobacteria (AMM)
3 Simultaneously with mammalian tuberculin and Mycobacterium allergen complex (MAC).
4. Correct 3

23. How is the epizootological control of the farm's well-being for tuberculosis carried out?
1.On the basis of serological tests of animals
2.Through clinical examinations
3.On the basis of allergic and pathomorphological investigations
4.Correct 1,2

24. Which indicators are decisive for the diagnosis of tuberculosis?
1.In case of mass isolation of tuberculin-reactive animals
2.When the pathogen is isolated from the pathmaterial and there are characteristic pathological and anatomical changes.
3.In the presence of emaciated animals, when the disease is accompanied by

24. Which indicators are determinant for the diagnosis of tuberculosis?
1.In case of mass isolation of tuberculin reactive animals
2.When the causative agent is isolated from pathogenic material and there are characteristic pathological and anatomical changes.
3.In the presence of emaciated animals, when the disease is accompanied by coughing.
4.Correct 1,2

25. In tuberculosis, how is simultaneous testing performed and with which allergens?
1.Mammalian PPD tuberculin is injected on one side of the animal's neck and allergen KAM or avian tuberculin is injected on the other side.
2.One side of the animal's neck is injected with KAM allergen and the other side with avian tuberculin.
3.KAM allergen is injected on one side of the animal's neck and medical tuberculin is injected on the other.
4.Correct 1,3

26. What are the main methods used in the diagnosis of animal brucellosis?
1. Clinical investigations
2.Pathological and anatomical investigations
3.Serological and allergic studies
4.Correct 1,2

27. Brucellosis is differentiated from which diseases?
1.Tuberculosis and paratuberculosis
2.Campylobacteriosis, infectious rhinotracheitis, leptospirosis and chlamydiosis
3.Bovine plague, malignant catarrhal fever.
4.Correct 1,2

28. How do you carry out health improvement measures in LPH in case of brucellosis?
1.By slaughtering for meat all animals reacting by RA and RSC
3.By slaughtering for meat all animals reacting with milk and RBCs.
4.By immunising all animals over one year old with brucellosis vaccine.
5.Correct 2,3

29. What species of animals are reservoirs of the causative agent of leptospirosis?
1.Wild animals and birds
2.Animals vaccinated against leptospirosis
3.Rodents and wild animals
4.Correct 3

30. When is the diagnosis of leptospirosis considered established?
1.Urine of animals is dark red in colour, increased content of bile pigments is found in blood
2.Appearance of aborted animals and delayed postpartum foetus.
3.Positive PMA, pathogen isolated from the pathmaterial.
4.Correct 1,2

31. What measures in relation to sick animals with leptospirosis are carried out in farms?

15. Signs of hemorrhagic tracheitis appear when:
a) Smallpox
b) Hemophilosis
c) Gout
d) ILT
e) Vitamin deficiency A

16. Cytoplasmic Bollinger-Borrell bodies are a specific feature:
a) IBB
b) Avian influenza
c) Marek's disease
d) Perosis
e) Smallpox

21. Deposition of uric acid salts in the joints in the form of white clots, white semi-liquid or dense mass is observed when:
a) Apteriosis
b) E-hypovitaminosis
c) ILT
d) Newcastle disease
e) Gout

22. A disease characterized by impaired bone formation, relaxation of the ligaments and tendons of the muscles of the limbs called:
a) Apteriosis
b) Perosis
c) Gout
d) Aerosaculitis
d) Pseudo-plague

23. Isolation of the avian infectious laryngotracheitis virus from the body of birds occurs through:
a) respiratory organs
b) eyes
c) gastrointestinal tract
d) skin
d) everything is correct
e) a and b are correct

24. Birds can excrete vaccine viruses from their bodies after use:
a) inactivated vaccines
b) attenuated vaccines
c) vaccines with adjuvants
d) associated live vaccines
d) everything is correct
e) b and d are correct

25. Live vaccines can be used:
a) injection
b) intraocular
d) orally
d) everything is correct
e) a and b are correct
g) a, b and c are correct
i) everything is wrong

26. Inactivated vaccines can be used:
a) injection
b) rubbing into the mucous membrane of the cloaca
c) rubbing into feather follicles
d) orally
d) everything is correct
e) a and b are correct
g) a, b and c are correct

27. With uric acid diathesis in old hens and roosters, signs are noted...
a) Inflammation of the joints.
b) Gout.
c) Salt deposits.
d) Inflammation of the liver.

28. Hepatitis happens along the way...
a) Only spicy.
b) Acute, subacute and chronic.
c) Acute and subacute.
d) Acute and chronic.
29. Sinusitis is...

a) Inflammation of the mucous membrane of the nasal passages.
b) Inflammation of the nasal passages and paranasal sinuses.
c) Inflammation of the mucous membrane of the accessory sinuses.
d) Inflammation of the synovial membrane.

30. Vaccine strains of Newcastle disease virus
a) La Sota
b) Clone-30
c) Bor-74
d) All answers

31. A sign of hypovitaminosis A in birds is:
a) blindness
b) peeling of the skin
c) intense color of egg yolk
d) everything is correct
d) everything is wrong
e) a and b are correct

32. In the body of birds, the influenza virus is localized:
a) in the endothelium of blood vessels

b) in the epithelium of the respiratory organs
c) in the brain
d) everything is correct
d) everything is wrong
e) a and b are correct

33. Isolation of the avian infectious laryngotracheitis virus from the body of birds occurs through:
a) respiratory organs
b) eyes
c) gastrointestinal tract
d) skin
d) everything is correct
e) a and b are correct

34. The cause of rhinitis and sinusitis in goslings and ducklings...
a) Hypothermia of young and adult birds.
b) Exposure to cold rain and snow.
c) Keeping poultry in stagnant, heavily polluted water bodies.
d) Accumulation of ammonia and microflora in the premises.

35. Pneumoaerosacculitis is...
a) Inflammation of the lungs and air sacs.
b) Pneumonia in poultry.
c) Inflammation of the air sacs in birds.
d) Inflammation of the bladder in birds.

36. Prevention of goiter inflammation in poultry is...
a) Feeding poor-quality feed, drinking from contaminated sources.
b) Avoid overfeeding or long breaks in feeding.
c) Poultry must be provided with sufficient drinking water water.
d) Avoid feeding poor-quality feed and water from contaminated source.

37. Gastroenteritis happens along the way...
a) Acute, subacute and chronic.
b) Acute and chronic.
c) Acute and subacute.
d) Only spicy.

38. Symptoms of fatty hepatosis in poultry are...

a) Egg production decreases, the bird becomes lethargic, sits for a long time, body weight increases, diarrhea or constipation appears.
b) The bird is depressed, decreased appetite, lethargy, cyanosis of the comb or earrings.
c) Feces are a white semi-liquid mass, the skin
around the cloaca is inflamed, the bird is depressed.
d) Young animals are stunted, egg production and hatchability in laying hens decrease eggs, symptoms of gastroenteritis appear, body weight increases.

39. Symptoms of tocopherol deficiency in chickens are...
a) Hemorrhages in the subcutaneous tissue, pale skin.
b) Chickens are stunted and depressed.
c) Loss of appetite, lethargy, unsteady gait, movements in circles,
curling fingers.
d) Perverted appetite, ruffled feathers, drooping wings,
weakness and curvature of the limbs, lameness.

40. Birds with influenza are treated:
a) antimicrobial drugs
b) antiviral drugs
c) vitamins in high doses
d) treatment has not been developed
d) everything is wrong
e) a and b are correct
g) b and c are correct

Competency being developed: PC-14 Organization of preventive immunizations (vaccinations), therapeutic and prophylactic treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them:

PC-14ID-1 Be able to evaluate the effectiveness of preventive measures taken and methods of their implementation, including using digital technologies;

1. Antibiotics for treating birds during acute outbreaks of viral diseases are selected depending on:
a) clinical signs
b) the breadth of the spectrum of action of the drug
c) the age of the birds
d) sensitivity of isolated pathogens
d) everything is correct
e) a and b are correct
g) correct a, b, d

h) everything is wrong

2. For the treatment of tuberculosis and aspergillosis the following is used:
a) antibiotics
b) antiviral drugs
c) sulfonamides
d) everything is correct
d) everything is wrong
e) a and b are correct

Competency being developed: PC-14ID-2 Know the procedure for conducting a clinical study of animals when planning preventive measures;

3. Inactivated vaccines can be used:
a) injection
b) rubbing into the mucous membrane of the cloaca
c) rubbing into feather follicles
d) orally
d) everything is correct
e) a and b are correct
g) a, b and c are correct

4. Clinical study of poultry:
a) group
b) individual
c) massive
d) group and individual

5. How many times a day should a healthy bird be examined:
a) five
b) three
at two
d) one

Competency being developed: PC-14ID-3 Know the types of anti-epizootic measures and the requirements for their implementation in accordance with guidelines, instructions, manuals, rules for diagnosis, prevention and treatment of animals.

6. Differential diagnosis of colibacillosis and pasteurellosis is carried out:
a) according to clinical signs
b) according to pathological changes
c) according to the results of electron microscopy
d) by antibody titer in the blood of sick birds
e) by light microscopy of stained preparations
e) everything is wrong

g) correct a, b, d

7. Birds with influenza are treated:
a) antimicrobial drugs
b) antiviral drugs
c) vitamins in high doses
d) treatment has not been developed
d) everything is wrong
e) a and b are correct
g) b and c are correct

8. The cause of lameness in adult birds in the household may be:
a) perosis
b) gout
c) disorders of mineral metabolism
d) reoviral tenosynovitis
d) everything is correct
e) b and d are correct
g) b and c are correct
h) a and b are correct

9. Differential diagnosis of influenza and Newcastle disease of birds is carried out:
a) according to clinical signs
b) according to pathological changes
c) according to the results of electron microscopy
d) by antibody titer in the blood of sick birds
e) by the presence of viral antigen in tissues
e) everything is correct
g) a, b, c are correct

10. A person can become infected with aspergillosis:
a) from a sick bird
b) from a clinically healthy bird
c) from a wild bird
d) from poultry
d) everything is wrong
e) a and d are correct
g) everything is correct

11. Differential diagnosis of colibacillosis and pasteurellosis is carried out:
a) according to clinical signs
b) according to pathological changes
c) according to the results of electron microscopy

d) by antibody titer in the blood of sick birds
e) by light microscopy of stained preparations
e) everything is wrong
g) correct a, b, d

12. Birds with influenza are treated:
a) antimicrobial drugs
b) antiviral drugs
c) vitamins in high doses
d) treatment has not been developed
d) everything is wrong
e) a and b are correct
g) b and c are correct

13. Antibiotics for treating birds during acute outbreaks of viral diseases are selected depending on:
a) clinical signs
b) the breadth of the spectrum of action of the drug
c) the age of the birds
d) sensitivity of isolated pathogens
d) everything is correct
e) a and b are correct
g) correct a, b, d
h) everything is wrong

14. For the treatment of tuberculosis and aspergillosis the following is used:
a) antibiotics
b) antiviral drugs
c) sulfonamides
d) everything is correct
d) everything is wrong
e) a and b are correct

15. Poultry mycoplasmosis may affect:
a) eye
b) respiratory organs
c) joints
d) ovary
d) everything is correct
e) a and b are correct
g) a, b and d are correct

16. Rhinitis is...

a) Inflammation of the mucous membrane of the trachea.
b) Inflammation of the mucous membrane of the nasal passages.
c) Inflammation of the mucous membrane of the sinuses.
d) Inflammation of the wound.

17. The main cause of rhinitis...
a) Hypothermia of young and adult birds.
b) Exposure to cold rain and snow.
c) Keeping poultry in stagnant, heavily polluted water bodies.
d) Accumulation of ammonia and microflora in the premises.

18. Cuticle is called...
a) Section of the intestine of a bird.
b) Skin growth near the claws.
c) The third eyelid of a bird.
d) Muscular stomach in a bird.

19. Cloacite is...
a) Inflammation of the mucous membrane of the cloaca.
b) Inflammation of the beak.
c) Obstruction of the cloaca.
d) Cloaca prolapse.

20. Yolk peritonitis in Latin is called...
a) Salpengoperitanitis
b) Solpingoperitonitis
c) Salpingoperitonitis
d) Solpenhoperitonitis

21. A sign of hypovitaminosis A in birds is:
a) blindness
b) peeling of the skin
c) intense color of egg yolk
d) everything is correct
d) everything is wrong
e) a and b are correct

22. In the body of birds, the influenza virus is localized:
a) in the endothelium of blood vessels
b) in the epithelium of the respiratory organs
c) in the brain
d) everything is correct
d) everything is wrong

e) a and b are correct

23. Isolation of the avian infectious laryngotracheitis virus from the body of birds occurs through:
a) respiratory organs
b) eyes
c) gastrointestinal tract
d) skin
d) everything is correct
e) a and b are correct

24. Birds can excrete vaccine viruses from their bodies after use:
a) inactivated vaccines
b) attenuated vaccines
c) vaccines with adjuvants
d) associated live vaccines
d) everything is correct
e) b and d are correct

25. Live vaccines can be used:
a) injection
b) intraocular
d) orally
d) everything is correct
e) a and b are correct
g) a, b and c are correct
i) everything is wrong

26. Inactivated vaccines can be used:
a) injection
b) rubbing into the mucous membrane of the cloaca
c) rubbing into feather follicles
d) orally
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d) Only spicy.

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c) Feces are a white semi-liquid mass, the skin around the cloaca is inflamed, the bird is depressed.
d) Young animals are stunted, egg production and hatchability in laying hens decrease eggs, symptoms of gastroenteritis appear, body weight increases.

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d) Perverted appetite, ruffled feathers, drooping wings, weakness and curvature of the limbs, lameness.

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d) treatment has not been developed
d) everything is wrong
e) a and b are correct
g) b and c are correct

List of questions for testing

Competency being developed: - (PC-3 Diagnosis based on analysis of anamnesis data, general, special (instrumental) and laboratory research methods

PC-3ID-1 Be able to make a diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases

PC-3ID-2 Be able to use specialized information databases for diagnosing animal diseases

PC-3ID-3 Be able to document the results of clinical studies of animals using digital technologies

PC-3ID-4 Know the methods of interpretation and analysis of data from special (instrumental) methods of animal research

PC-3ID-5 Know the norms of indicators of the state of biological material of animals of different species and the reasons that cause deviations of indicators from the norms

PC-3ID-6 Know the etiology and pathogenesis of animal diseases of various species

PC-3ID-7 Know generally accepted criteria and classifications animal diseases, approved lists of animal diseases

1. The structure of industrial poultry farming, types of farms, their tasks and methods of implementing tasks.
2. Methods of keeping and feeding birds, a brief description of the main industrial breeds.
3. The influence of the conditions of industrial keeping of birds on their health.
4. The main tasks of veterinary technology in industrial poultry farming and methods for solving them.
5. Basic principles of biosafety.
6. Key points in biosafety management, the most risky stages, ways to reduce the risk of pathogen introduction.
7. Ways to prevent infection of people.
8. HACCP system.

9. Brief characteristics of diseases caused by avian PMV serotypes.
10. Newcastle disease. Etiology, pathogenesis, epizootic features, clinical and pathological signs, diagnosis, control and prevention measures.
11. Causes, pathogenesis, clinical and pathological signs of avian influenza.
12. Methods for diagnosing avian influenza. Differential diagnosis.
13. Methods for eliminating avian influenza. Prevention.
14. Classification of avian mycoplasmosis.
15. Causes, pathogenesis, clinical and pathological signs of avian mycoplasmosis.

Competency being developed: - (PC-5 Development of a treatment plan for animals based on the established diagnosis and individual characteristics of the animals, selection of the necessary drugs of a chemical and biological nature for the treatment of animals, taking into account their total pharmacological effect on the body:

PC-5ID-1 Be able to use specialized information databases when choosing methods of treating animals;

PK-5ID-2 Be able to calculate the amount of medicines for treating animals and preventing diseases with drawing up prescriptions for a certain period;

PK-5ID-3 Be able to calculate the amount of medicines for the treatment of animals and the prevention of diseases with the preparation of prescriptions for a certain period, including using digital technologies;

PK-5ID-4 Be able to administer drugs into the body of animals in various ways;

PC-5ID-5 Know the methods of drug treatment of sick animals and indications for their use in accordance with guidelines, instructions, manuals, rules for diagnosis, prevention and treatment of animals;

PC-5ID-8 Know the technique of introducing medicinal substances into the animal's body by enteral (oral, sublingual and rectal administration) and parenteral (injection, inhalation and cutaneous applications) methods.

1. Measures for the prevention and control of avian mycoplasmosis.
2. Structure of the veterinary service of the poultry farm.
3. Methods of catching and fixing birds.
4. Medical examination method and its use in group research.
5. Individual clinical study, work procedure.
6. The procedure for group study of birds.
7. How to evaluate a bird's reaction to stimuli?
8. How to measure body temperature in birds?
9. How to evaluate breathing and heart function in birds?
10. How to assess the condition of the feather and skin?

Formed competence: - (PC-13 Organization of measures to protect the organization from the introduction of infectious and parasitic diseases in accordance with the plan of anti-epizootic measures:

PC-13ID-1 Know the types of measures to ensure veterinary and sanitary safety and the requirements for their implementation in accordance with the legislation of the Russian Federation in the field of veterinary medicine;

1. What diseases are observed in birds when mineral metabolism is disrupted?
2. Causes of mineral metabolism disorders in birds.
3. Causes of cannibalism.
4. Diagnosis of bird diseases associated with impaired mineral metabolism.
5. Treatment and prevention of mineral metabolism disorders in birds.
6. Causes of gout and perosis in birds.
7. Treatment and prevention of gout and perosis in birds.
8. Egg formation.
9. Diseases of the organs of egg production

Competencies being developed: - PC-14 Organization of preventive immunizations (vaccinations), therapeutic and prophylactic treatments of animals in accordance with the plan of anti-epizootic measures, analysis of the effectiveness of measures for the prevention of animal diseases in order to improve them:

PC-14ID-1 Be able to evaluate the effectiveness of preventive measures taken and methods of their implementation, including using digital technologies;

PC-14ID-2 Know the procedure for conducting a clinical study of animals when planning preventive measures;

PC-14ID-3 Know the types of anti-epizootic measures and the requirements for their implementation in accordance with guidelines, instructions, manuals, rules for diagnosis, prevention and treatment of animals

10. Name the signs and ways to help with egg retention.
11. Egg incubation systems.
12. How are eggs selected for incubation?
13. How is technological control of egg incubation carried out?
14. Methods of biological control of egg incubation.
15. Classification of embryonic diseases.
16. Differential diagnosis of smallpox and ILT.
17. Differential diagnosis of Marek's disease and avian leukemia.
18. Classification of avian leukemia.
19. Causes, pathogenesis, clinical and pathological signs of avian tuberculosis.
20. Diagnosis of avian tuberculosis.
21. Diagnosis of salmonellosis in birds.
22. A comprehensive method for improving the health of farms from salmonellosis.
23. Vaccines for the prevention of colibacillosis and pasteurellosis in birds. Rules for their application.

Methodological materials defining procedures for assessing knowledge, skills and experience, characterizing the stages of competence formation

Monitoring the mastery of the discipline "Bird Diseases" is carried out in accordance with the regulations "On the forms, frequency and procedure for ongoing monitoring of progress and intermediate certification of students." Current control in the discipline allows you to assess the degree of perception of the educational material and is carried out to evaluate the results of studying sections/topics of the discipline.

Criteria for assessing students' knowledge during testing

An "excellent" grade is given if the student answers no less than 90% of the test tasks correctly;

A "good" grade is given if the student answers no less than 80% of test items correctly;

A "satisfactory" grade is given if the student's correct answer is at least 70%; An "unsatisfactory" grade is given if the student answers correctly to less than 70% of the test tasks.

Criteria for assessing answers to test questions:

Mark "excellent" - the answer is given in full;

The "good" mark performs error analysis correctly. The answer is given correctly, taking into account 1-2 minor errors or 2-3 shortcomings, corrected independently at the request of the teacher.

Marked "satisfactory", the answer is given at least half correctly, 1-2 errors or one gross mistake were made.

The mark "unsatisfactory" means two (or more) gross errors were made during the answer, which the student cannot correct even at the request of the teacher.

ACCESSIBILITY AND QUALITY OF EDUCATION FOR DISABLED PEOPLE

If necessary, persons with disabilities and persons with disabilities are given additional, time to prepare an answer for the test.

When conducting the procedure for evaluating the learning outcomes of disabled people and persons with disabilities, their own technical means can be used.

The procedure for evaluating the learning outcomes of disabled people and persons with disabilities in the discipline provides for the provision of information in forms adapted to the limitations of their health and perception of information:

For people with visual impairments:	– in printed form in enlarged font; – in the form of an electronic document.
For people with hearing impairments:	– in printed form; – in the form of an electronic document.

For people with disorders of the musculoskeletal system:	– in printed form, the device; – in the form of an electronic document.

When conducting the procedure for evaluating the learning outcomes of disabled people and persons with disabilities in the discipline, it ensures that the following additional requirements are met, depending on the individual characteristics of the students:

a) instructions on the procedure for conducting the assessment procedure are provided in an accessible form (orally, in writing);

b) an accessible form of assignment of assessment tools (in printed form, in printed form in enlarged font, in the form of an electronic document, assignments are read out by the teacher);

c) an accessible form of providing answers to tasks (written on paper, a set of answers on a computer, orally).

If necessary, for students with disabilities and the disabled, the procedure for evaluating the results of training in the discipline can be carried out in several stages.

The procedure for evaluating the learning outcomes of disabled people and persons with disabilities is allowed using distant learning technologies.