

**Federal State Autonomous Educational Institution of Higher  
Education «Peoples' Friendship university of Russia»  
Agrarian Technological institute**

**PROGRAM**

**State final examination**

**The direction of training (specialty)**

**36.06.01 Veterinary and animal science**

Graduate's qualification; Researcher. Mentor-researcher

The direction of programme (profile, specialty):

06.02.01«Diagnostic of diseases and animals' therapy, pathology, oncology  
and morphology»

**Qualifications (degree) graduate: Researcher. Teacher-researcher**

Moscow

## 1. General Provisions

1.1. Responsibilities and procedures for the preparation and conduct of the state final tests in the People's Friendship University, as well as a list of the order, the time required for the documents required for implementation of the state final examination, between the structural units determines the procedure for conducting the final state certification of students.

1.2. State final examination on the direction of training (specialty) 36.06.01 "Veterinary medicine and animal science" (training of highly qualified personnel (post-graduate)) includes the delivery of state examination in direction and profile of training and defense of final qualifying work in the form of a scientific paper presentations.

1.3. The results of any of the types of certification tests, included in the state final examination are determined by assessments of "excellent", "good", "satisfactory", "unsatisfactory".

## 2. Aims and objectives of the state final examination

2.1. **The purpose** of the state final examination is to determine that the results of development of basic educational programs studying OS requirement in PFUR / GEF IN.

2.2. **The objectives** of the state final examination are:

- Quality control person training basic laws of natural science phenomena and required in professional activities;
- Determining the level of theoretical and practical training for graduates to perform professional tasks in accordance with the qualifications obtained;
- The establishment of the degree of the individual pursuit of self-development, improving their qualifications and skills;
- Check the formation of a sustainable motivation for professional activity in accordance with the provided OS IN PFUR / GEF IN professional activities;
- Testing the ability to find the organizational and managerial decisions in unusual

situations and a willingness to take responsibility for them;

- Ensuring the integration of education, scientific and technical activities, more efficient use of scientific and technological achievements, the reform of the scientific sphere to stimulate innovation;
- Ensuring the quality of training in accordance with the requirements of the OS IN PFUR / GEF IN.

State Examination Program.

2.1. State exam is conducted verbally.

2.2. As part of the state examination verified the degree of development of the graduates of the following competencies:

A) Universal jurisdiction: generating new ideas in solving the research and practical tasks, including in interdisciplinary fields (UC-1); the ability to design and implement integrated research, including interdisciplinary, a holistic system of scientific outlook on the knowledge of the history and philosophy of science (UC-2); willingness to participate in the work of Russian and international research teams to address scientific and educational tasks (UC-3); willingness to use modern methods of scientific communication and technology at the state and foreign languages (UC-4);

Ability of follows to ethic norms in professional activity (UC -5);

Ability of plans and solves own professional and personality development tasks (UC -6).

Graduate mastered PhD programme should has the next general professional competences:

Holding necessary knowledge system in area appropriate to the direction of preparing (GPC-1);

Holding methodology of researches in area that appropriate to the preparing direction (GPC-2);

Holding culture of research including using very new information-communication technologies (GPC-3);

Ability of use efficient research methods in an independent research activity appropriate to the direction of preparing (GPC-4);

Preparedness of organize research collective work in scientific branch appropriate to the direction of preparing (GPC-5);

Ability of self-improvement based on traditional morality (GPC-6);

Preparedness of mentor's activity at higher educational programme (GPC-7);

Ability of own motivated decisions in non-standard situations and preparedness to be responsible for its aftermath (GPC-8).

A graduate mastered PhD programme should to has the next professional competences:

Ability of understand contemporary veterinary and animal science problems and to use fundamental representations in professional activity sphere for positing and solving of new tasks (PC-1);

Ability to use the basic theories, concepts and principles in chosen activity area, ability of systematic thought (PC -2);

Having information independent analysis, finding a fundamental problemmes, positing of research tasks and goals, doing laboratory researches at solving the tasks in specialty using contemporary aperture and computational means, demonstrating responsibility for quality of work and science outcomes truly (PC -3);

Knowledge of veterinarian and animal science history and methodology increasing fundamental general professional preparing (PC -4);

Ability of creatable using contemporary computational technologies at collecting, saving, working, analyzing and transferring of information (PC -5);

Ability of understand and deep think philosophy natural science concepts, place of veterinary and animal science in output science thought (PC -6);

Using skills of professional collectives' work organization and guide, ability of interdisciplinary communication and free business communication in Russian and foreign languages, work in international collective (PC -7);

Ability of outcomes researches and production-technology works professional arrangement and presentation in approved forms (PC -8);

Using of normative documents' knowledges stating organization and method of realization researches and production-technology works, ability of lead work collective, provide limits of production security (PC -9);

Existence of forming studying staff skills, reading lectures, readiness to mentoring in a higher school and leading students researches (SR), skills of studying staff presentation in oral, written and graphic forms for different group of listeners (PC -10).

A: The volume of state exam: Questions for the DPA contains 25 tickets. Each ticket contains 4 issues: 2 questions regarding pedagogy of higher education and 2 questions in the part of the discipline of specialization.

B. Contents of the state exam:

### **In terms of Higher School Pedagogy**

1. General characteristic of the basic theoretical and methodological aspects of the Higher School of Pedagogy.
2. Current development of education in Russia and abroad.
3. Fundamentalization of education in high school.
4. The object and subject of study of pedagogy and psychology of higher education.
5. Brief description of the current state of higher education in Russia.
6. Current trends in higher education abroad, and the prospects for the development of higher education.
7. Informatization of education in higher education.
8. General description of the main theoretical and methodological aspects of pedagogy and psychology of higher education.
9. The current development of education in Russia and abroad.
10. Fundamentalization of education in high school.

11. The object and subject of study of pedagogy and psychology of higher education.
12. Brief description of the current state of higher education in Russia.
13. Modern trends in higher education abroad, and the prospects for the development of higher education.
14. The Bologna Declaration and the Bologna process.
15. Didactics of higher education. The general concept of didactics.
16. The essence of the competence approach in education.
17. Characteristics of the structure of educational activities.
18. Pedagogical skills and pedagogical skills of high school teacher.
19. The forms of organization of educational process in high school.
20. Activities consciousness as the main characteristic of the subject of education in higher education.
21. The general concept of activity.
22. Activities and cognitive processes. Learning as an activity.
23. Trends in the development of innovation in higher education.
24. Problems of innovation high school teachers.
25. The place of the lecture at the university.
4. Seminars and workshops in high school.
5. Independent work of students as the development and self-organization of students of personality.
6. Fundamentals of pedagogical monitoring in high school.
7. The introduction of achievements of science and dissemination of advanced pedagogical experience as a process of innovation in higher education.
8. Pedagogical designing in high school.
9. Pedagogical technologies and their classification.
10. Modular Training in the context of the modernization changes in the Russian system of higher education.
11. The concept and principles of modular training.
12. Technology problem-based learning.

13. Trends and ideas of innovation activity of high school teachers.
14. Technology semantic-contextual learning. Business game as the leading form.
15. Characteristics of case-method.
16. Characteristics of a method of projects.
17. Heuristic learning technology.
18. Technology of developing training.
19. The distance learning technology.
20. Onlain training webinars based technology.
21. Theory of planned formation of intellectual actions as an example of a consistent realization of the activity approach to learning.
22. Psychology and the problems of education in higher education.
23. Characteristics of the structure of personality.
24. Characteristics of personality development.
25. Development of creative thinking of students in the learning process.
26. Psycho in high school.
27. Analysis of the professional activities of the university teacher.
28. Psychological factors of the successful training of students in high school.

in a part of the discipline of specialization (profile 06.02.01)

1. Diseases of the urinary tract (pyelitis, urotsistit, urolithiasis).
2. Diseases of the female external genitalia.
3. Productive animal health. Components of the overall prevention of domestic non-communicable diseases.
4. Hemorrhagic diathesis (hemophilia, thrombocytopenia, krovopyatnistaya disease).
5. Principles of treatment (prophylactic, physiological, complex active, feasibility).
6. General and local anesthesia (methods, inGPCations and contrainGPCations).
7. Syndrome metritis-mastitis-agalactia.
8. Treatment of tumors

9. Methods of nonspecific supportive therapy (hemotherapy, proteino-, lizatoterapiya, tissue therapy).
10. Bleeding and blood loss (clinical picture, how to stop bleeding).
11. Means of treatment (mechanical, physical, chemical and biological).
12. The therapy, which regulates neuro-trophic function (blockade of the autonomic nervous system in the internal non-communicable diseases). treatment methods focus on the therapeutic effect (causal, pathogenetic, symptomatic, replacement).
13. Diseases of the myocardium (myocarditis, myocardosis, miokardiofibroz, myocardiosclerosis).
14. Diet therapy of internal diseases of animals.
26. Oncological diseases of the reproduction of small animals.
27. Diseases of the liver (hepatitis, steatosis, amyloidosis, cirrhosis). Diseases of the hoof in horses (diagnosis, treatment, prevention).
28. endometritis (etiology, diagnosis, treatment, prevention).
29. Diseases of the pleura (pleurisy, hydrothorax, hemothorax, pneumothorax, chylothorax).
30. Colic in horses (classification, diagnosis, and therapy). Anemia (hemorrhagic, hemolytic, aplastic, aplastic).
31. Diseases of the pericardium (pericarditis, hydropericardium).
32. Kidney disease (nephritis, nephrosis, nefrosileroz, pyelonephritis).
33. Diseases of the muscle and tendon and ligaments.
34. Diseases of the proventriculus of ruminants (atony, timbreles, parakeratosis scar, traumatic reticulo).
35. Diseases of metabolism in carnivorous animals (classification, diagnosis, treatment, prevention).
36. Disorders of mineral metabolism
37. Functional CNS diseases (stress, neurosis, epilepsy, eclampsia).
38. Rheumatic inflammation of the hoof.
39. The non-contagious disease etiology newborns.



40. Disorders of protein and carbohydrate metabolism (ketosis, myoglobinuria, alimentary dystrophy, obesity).
41. Organic diseases of the CNS (solar and thermal shocks, inflammation of the brain and spinal cord and membranes).
42. Injuries animals. Preventive measures.
43. Diagnosis of disorders of the valve system of the heart
44. Diagnosis of mediastinal disease
45. Special methods of modern diagnosis of heart disease
46. The principles of diagnostic CT
47. The principles of ultrasound diagnostics
48. The principles of x-ray diagnostics
49. Diagnosis of Lung Diseases
50. Diagnosis of pleural diseases
51. Purulent pleurisy
52. Diagnosis of Liver Diseases
53. Diagnosis of Kidney Diseases
54. Diagnosis of diseases of the urinary system
55. The development of tumors
56. Neoplasms of milk packages
57. Neoplasms of the internal organs
58. Neoplasms of bone tissue
59. Pathologic diagnosis of acute processes
60. Methods of pathology diagnostics
61. DBC- syndrome

**in a part of the discipline of specialization (profile 06.02.02)**

1. The growth and development of bacteria
2. Effect of physical factors on microorganisms
3. Influence of biological factors on microorganisms
4. Culture media and differences in consistency, origin and destination

5. Sterilization and filtration of UV rays
6. The pathogenicity and virulence of microorganisms
7. Simple and complex staining methods
8. The concepts of infection, infection and infectious diseases
9. Ways of introduction and spread of pathogenic bacteria in organisms
10. The method of Gram stain
11. seeding technique of microorganisms on solid nutrient media
12. The method of wet steam sterilization
13. The method of staining microorganisms on Ziehl-Nielsen
14. The concepts of sterilization and use in practice
15. Bacteriological examination
16. The effect of environmental factors on the body
17. Sanitary air biological research
18. Antibiotics
19. The concepts of infection
20. Specific and acquired immunity
21. The breath of microorganisms (aerobic and anaerobic types of respiration)
22. hemagglutination and its variants.
23. Epizootology and the doctrine of infectious diseases in the modern structure of veterinary education, science and practice.
24. Epizootic process. Driving forces, conditions, mechanisms of development and manifestations.
25. Sources of infection and transmission of pathogens. Infection and the pathogenesis of infectious diseases.
26. Acquired immunity.
27. The anti-infective immunity. Susceptibility, resistance, immunological reactivity. The protective system of the body.
28. The active specific prophylaxis of infectious diseases and its organization.
29. Immunological aspects of infectious diseases (vaccination reaction and post-vaccination complications, immunopathology).

30. The scientific basis for the organization and implementation of anti-epizootic work.
31. Treatment of Infectious Diseases.
32. Diagnostic Theory and Practice of Epidemiology.
33. Disinfection (disinfection and disinfestation). The role and place in the anti-epizootic measures.
34. Geographical and Veterinary epizootology. Natural focal infections.
35. Epizootologichesky research method.
36. Features of prevention of infectious animal diseases in specialized farms.
37. Natural history and economics major infections.
38. The history of the fight against germs and viruses.
39. The international and global aspects of Epidemiology.
40. Acute epizootic infection of birds (except for Newcastle disease). Infectious diseases in rabbits, and laboratory animals.
41. Infections common to humans and animals.
42. Rabies.
43. Leukemia.
44. Infectious diseases of carnivores.
45. Classical swine fever.
46. Viral industrial livestock infections (RTIs, diarrhea, parainfluenza).
47. Infectious diseases of animals in the city. young infections.
48. Particularly dangerous and exotic cattle infections (plague, ephemeral fever).
49. Mycoses and mycotoxicosis.
50. Infectious diseases of fish and bees.

**in a part of the discipline of specialization (profile 06.02.10)**

1. Observation and experiment as the basic methods of research in biological science.
2. Research and economic, physiological and production experience.

3. The principle of the comparison as a method of setting the experiment.
4. experimental methods, built on the principle of similar groups.
5. Methods of experiment, built on the principle of group-periods.
6. Technique of experiments. Ethology experimental animals. Adaptive plasticity animals.
7. Methods of studying the growth and development of young animals.
8. Modern methods of selection and breeding work.
9. Evaluation of the reproductive capacity of animals.
10. Evaluation of the productivity of animals.
11. The basic elements of the theory of statistical hypothesis testing, the criteria for dependence on signs and homogeneous data. Biostatistics.
12. The role of technology and the growing conditions on the formation of productive qualities of animals.
13. The effect of the level of reproductive function in the productivity of animals.
14. The system of care for the animals as a factor that determines the formation of productive qualities of animals.
15. Characteristics of process parameters during the growth of young cattle.
16. Characteristics of process parameters during the growth of young pigs.
17. Characteristics of the technological parameters for growing young sheep.
18. Characteristics of process parameters during rearing of poultry of different species.
19. Characteristics of the technological parameters for growing young pets (dog, cat).
20. Evaluation methods of animal by phenotype.
21. Evaluation methods of animal genotype
22. Genetic markers. The advantages of genetic markers in front of the usual signs.
23. Methods of molecular genetic analysis in animal husbandry.
24. The role of external factors in the formation of productive traits in animals.
25. The effect of feeding on the growth rate of young animals and the quality of meat products.

26. The effect of feeding on the rate of growth of young animals and milk production.
27. The effect of feeding on meat and egg productivity in hens.
28. The effect of the level of reproductive function in the productivity of animals.
29. Methods of animal breeding.
30. Methods of preparation, evaluation and conservation of semen animals.
31. The theoretical background of the method of transplanted embryos.
32. Milk yield and reproductive function of animals.
33. Meat efficiency and reproductive function of animals.
34. egg production and reproductive function of poultry.
35. Marker-dependent selection of animals.
36. Genomic breeding animals.
37. Polymerase chain reaction (PCR).
38. The restriction fragments length polymorphism (RFLP). PCR-RFLP.
39. Sequencing. DNA chips.
40. The concept of thermoregulation of the body, its relationship with homeostasis. Mechanisms of thermoregulation of the body and how to use them.
41. The climatic and weather conditions and their impact on health and productivity.
42. aerostasis and measures to combat harmful gases indoors.
43. zoohygienic requirements for soil and water quality and the impact on animal productivity.
44. Methods of quality control of water and ways to improve it.
45. Prevention of animal diseases as a result of violations of sanitary rules and norms of feeding.
46. The use of feed additives, mycotoxins and mycotoxin prevention in animals.
47. The natural resistance of the body and ways to improve it.
48. Methods for monitoring the state of health of animals.
49. Prevention of stress caused by uncomfortable conditions of detention.
50. Environmental issues air monitoring, water, soil, feed.

### 3. Guidelines for the preparation and delivery of the final state exam

Recommended reading:

#### **Higher School Pedagogy**

1. Smirnov SD Pedagogy and Psychology of Higher Education: from the activity for the individual [electronic resource]: A manual for schools / SD Smirnov. -. 5 th ed., A stereotype ; Electronic text data. - Moscow: Academy, 2010. - 400 p.
2. Kanke VA History, philosophy and methodology of pedagogy and psychology [Text / electronic resource]: A manual for schools / VA Kanke; Ed. M.N.Berulavy. - Electronic text data. - M.: Yurayt, 2014. - 487 p.
3. Atabekova AA Communication skills formation of foreign language communicative competence of students in a multicultural multi-level training group [electronic resource]: Monograph / AA Atabekova, Belenkova NM - Moscow: Publishing House of People's Friendship University, 2010. - 326 p.
4. Verbitsky AA Personal and competent approach in education: problems of integration [Text / electronic resource]: Monograph. - Electronic text data. - Moscow: Logos, 2009, 2010, 2013. - 336 p.
5. Philosophy of Education in a multicultural society of the 21st Century: Collected articles. Issue 2 / Ed. V.M.Filippova; Ed. Number .: N.S.Kirabaev, A.V.Semushkin. - Moscow: Publishing House of People's Friendship University, 2011. - 238 p.
6. Ruzavin GI The methodology of scientific knowledge [Text]: A manual for schools / GI Ruzavin. - Moscow: UNITY-DANA, 2013. - 287 p.
7. Savvina OV Academic ethics: current problems and solutions [Text]: Textbook / OV Savvina. - Moscow: Publishing House of People's Friendship University, 2014. - 94 p.
8. Philosophy of Education in a multicultural society of the 21st Century: Collected articles. Issue 2 / Ed. V.M.Filippova; Ed. Number .: N.S.Kirabaev,

- A.V.Semushkin. - Moscow: Publishing House of People's Friendship University, 2011. - 238 p.
9. Shadrikov VD Professional abilities [Text]: Monograph / VD Shadrikov. - M.: University Book, 2010. - 320 p.
10. The quality of higher education / Ed. M.P.Karpenko. - Moscow: Publishing House of the SSU, 2012. - 291 p. : Ill. - ISBN 978-5-8323-0824-1: 0.00.
- Profile 06.02.01
1. Domestic animal diseases / under total. Ed. G.G.Scherbakova, A.V.Korobova. - AS Saint-Petersburg .: "Lan", 2009. - 736 p.
2. Workshop on domestic animal diseases / under total. Ed. G.G.Scherbakova, A.V.Korobova. - AS Saint-Petersburg .: "Lan", 2003.
3. NV Danilevskaya, AV Korobov, SV Starchenkov, GG Shcherbakov. Reference veterinary practitioner. / Ed. AV Korobov, GG Scherbakova. "MeGPCine World" series. - SPb .: Publishing. "Hind", 2000, 384 p.
4. IP Kondrahin, KV Smoking and other Clinical Laboratory diagnostika veterinary use:. Ouch. pos. - M .: Agropromizdat, 1985, 287 p.
5. IP Kondrahin Nutritional and endocrine diseases of animals. -M .: Agropromizdat, 1989, 256 p.
6. Reference veterinarian. NM Altukhov etc. -. M .: Kolos, 1996, 622s
7. IA Kalashnik et al. Non-communicable diseases loshadey.- M .: Agro-izdat, 1990,272s.
8. SV Starchenkov Diseases of the small animals: diagnosis, treatment, prevention. Series "Textbooks for schools. Special literature. " - SPb. Univ. "Lan", 1999, 512s.
- Profile 06.02.02
1. Infectious animal diseases \ ed. A.A.Kudryashova and A.V.Svyatkovskogo. - St. Petersburg, 2007. -. 608, p.
2. Fundamentals of infectious immunology \ V.V.Makarov etc. -. Vladimir-Moscow, 2000. -200 p.
3. The method of research Epizootologichesky \ V.V.Makarov, O.I.Suharev etc.

- SPb., 2009. - 224.
4. VV Makarov Essays on the history of the fight against infectious diseases - M., 2008. - 220 p.
5. Makarov VV Epizootology and infectious diseases in questions and answers. - M., 2003.-192s.
6. Socio-legal bases of veterinary activities in Russia. Collector of normative documents and samples \ ed. V.M.Avilova. St. Petersburg, 1995. -. 255.
7. A list of the OIE and transboundary disease \ V.V.Makarov, O.I.Suharev etc. 2010. -. 142.
8. Epizootologicheskyy lexicon \ V.V.Makarov, O.I.Suharev etc. -. M., 2001. - 176 p.
- Profile 06.02.10
1. Health of farm animals: a 2 kN. Textbook. / AF Kuznetsov, M. Demchuk, Karelin AI - M .: Kolos.- 1999. - 399 p. Kuznetsov, AF Hygiene animal: a handbook / AF Kuznetsov St. Petersburg .: "Lan" Publisher, 2003.-640 with.
2. zoohygiene the basics of designing livestock facilities: studies. for schools / MS Naydensky etc. -. M .: KolosS, 2007 - 458s.
3. zoohygiene the basics of designing livestock facilities: Electronic educational and methoGPCal complex (EUMK) ./ Zabudskii YI, Kamalov RA, Kocsis II, Naydensky MS Tadjiev AV Totoeva M .E.- M .: 2008.
4. Lumbunov SG Productivity and resistance of dairy cattle Buryatia. - Ulan-Ude 2001.
5. Workshop on zoogigiene the basics of designing livestock facilities: Textbook for high schools. /A.F. Kuznetsov, MS Naydensky, VM Kozhurin, VI Balanin, NS Kalyuzhny. -M .: KolosS.- 2007.-343 with.
6. Bolshakova MV Physiological inGPCators and technological features of use ippoterapevticheskikh horses / Monograph / M.V.Bolshakova; Ros. state. agrarian. zaoch. Univ. Moscow, 2009 45c.
7. Voltchkova LA Sanitary-hygienic assessment of feed properties: Lektsiya., Moscow, 1999.



8. AN Golikov A.N. Adaptation of farm animals / AN Golikov - M .: 1985. Agropromizdat 216c
9. Teeth ND Diseases sobak.-Moscow; Niva, 1996.
10. Naydensky MS, EP Yevglevsky Effect mode lighting on birds rezisteshnost // Poultry, №6,1985.
11. Naydensky MS, IS Slot et al. The use of succinic acid in stressful conditions ?; to increase resistance in chickens. 1995.
12. Naydensky MS Zoogigiekicheskie effective ways to improve the resistance of birds and in the conditions of resource-saving technologies: MethoGPCal rekomendatsii., Moscow, 1998.
13. IN Nikitchenko, Adaptation, stress and productivity of farm animals / IN Nikitchenko, SI Plyaschenko, AS Zenkov Mn .: 1988. Uradzhay 5 107c

4. Evaluation means for establishing in the certification tests of compliance / non-compliance level of training of graduates who have completed the development of OP IN towards training / specialty requirements of the relevant OS IN PFUR/GEF IN. The list of competencies that the student must acquire as a result of the development of the educational program:

A)Universal juris GPC tion: generating new ideas in solving the research and practical tasks, including in interdisciplinary fields (UC-1); the ability to design and implement integrated research, including interdisciplinary, a holistic system of scientific outlook on the knowledge of the history and philosophy of science (UC-2); willingness to participate in the work of Russian and international research teams to address scientific and educational tasks (UC-3); willingness to use modern methods of scientific communication and technology at the state and foreign languages (UC-4); the ability to follow ethical standards in their professional activities (UC-5); the ability to plan and solve problems of their own professional and personal

development (UC-6).

B) General professional competences:  
possession of the necessary knowledge of the system in an area corresponding to the direction of preparation (GPC-1);  
possession of research methodology in the corresponding direction of preparation (GPC-2);  
ownership culture of scientific research; including using the latest information and communication technologies (GPC-3);  
the ability to use effective methods of research in independent research activities in the field relevant field of study (GPC-4);  
willingness to organize a research team working in the scientific field, relevant training direction (GPC-5);  
the ability to self-improvement on the basis of traditional morality (GPC-6);  
readiness to teaching in educational programs of higher education (GPC-7);  
ability to make independent decisions motivated in unusual situations and willingness to take responsibility for their consequences (GPC-8).

B) Professional competence:

Ability of understand contemporary veterinary and animal science problems and to use fundamental representations in professional activity sphere for positing and solving of new tasks (PC-1);

Ability to use the basic theories, concepts and principles in chosen activity area, ability of systematic thought (PC -2);

Having information independent analysis, finding a fundamental problemmes, positing of research tasks and goals, doing laboratory researches at solving the tasks in specialty using contemporary aperture and computational means, demonstrating responsibility for quality of work and science outcomes truly (PC -3);

Knowledge of veterinarian and animal science history and methodology increasing fundamental general professional preparing (PC -4);

Ability of creatable using contemporary computational technologies at collecting, saving, working, analyzing and transferring of information (PC -5);

Ability of understand and deep think philosophy natural science concepts, place of veterinary and animal science in output science thought (PC -6);

Using skills of professional collectives' work organization and guide, ability of interdisciplinary communication and free business communication in Russian and foreign languages, work in international collective (PC -7);

Ability of outcomes researches and production-technology works professional arrangement and presentation in approved forms (PC -8);

Using of normative documents' knowledges stalemating organization and method of realization researches and production-technology works, ability of lead work collective, provide limits of production security (PC -9);

Existence of forming studying stuff skills, reading lectures, readiness to mentoring in a higher school and leading students researches (SR), skills of studying stuff presentation in oral, written and graphic forms for different group of listeners (PC -10).

Questions about the DPA contains 25 tickets. Each ticket contains 4 issue: 2 questions regarding pedagogy of higher education and 2 questions in the part of the discipline of specialization. Each question is assessed separately on the "five-point" scale. The final grade is derived as the arithmetic average score for the 4 questions.

**The scale of assessment for oral answer:  
Evaluation "5" (excellent) is placed, if:**

- Fully disclosed the content of the material examination card;
- The material is presented correctly, in a certain logical sequence;
- demonstrated systemic and deep knowledge of program material;
- Similarly, the terminology used;
- shown the ability to illustrate the theoretical principles with specific examples, to

- apply them in new situations;
- demonstrated uptake previously studied related issues, Maturity and stability of competences and skills;
  - The answer sounded independently, without leading questions;
  - Demonstrate the ability to creatively apply knowledge of theory to the solution of professional problems;
  - Demonstrated knowledge of modern educational and scientific literature;
  - Admitted 1-2 inaccuracies in the light of secondary issues that are corrected by the remark.

**The rating of "4" (good) is placed, if:**

- Questions exam material sets out systematically and consistently;
- Demonstrated ability to analyze the material, but not all the conclusions are reasoned and demonstrative character;
- Demonstrated understanding of basic literature;
- A satisfies the basic requirements of the evaluation "5", but it has one disadvantage:

as submitted by eligible small spaces, not to distort the content of the response; 1-2 admitted shortcomings in covering the main content of the response that is fixed by the remark of the examiner; mistakes or shortcomings 2 while covering minor problems that are easily corrected by the remark of the examiner.

**Evaluation of "3" (satisfactory) is put, if:**

- incomplete or inconsistent disclosed the content of the material, but shows the general understanding of the issue and demonstrated skills, sufficient for further assimilation of the material;
- learn basic categories for consideration and additional issues;
- There were difficulties or mistakes in definition of concepts, the use of terminology that is fixed after a few leading questions;
- Incomplete knowledge of theoretical material found insufficient Maturity of

competence and skills, the student can apply the theory to the new situation;  
– Demonstrated understanding of basic literature.

**The rating of "2" (unsatisfactory) is placed, if:**

Not disclosed the basic content of educational material;  
Detected ignorance or misunderstanding more or most important part of teaching material;

A mistake in identifying the concepts and use of terminology that is not corrected after a few leading questions;

Not formed competence and skills.

### **5.Requirements for the final qualifying work.**

To protect the FQW allowed the student who has passed the state examination. Protection WRC held in an open meeting of the State Examination Commission (SEC).

WRC is the protection of research results carried out by students in the form of a scientific paper demonstrating the readiness of the graduate to conduct professional scientific and pedagogical activity.

Sci-qualification work should be written in their own graduate students, have internal unity and maintain the position put forward for public protection should indicate personal contribution to the task of post-graduate students, of significant importance for science in accordance with the teaching focus. Proposed by the author outlet scientific qualification work decisions must be reasoned and evaluated in comparison with other known solutions.

Requirements for final qualifying work are determined by GOST R 7.0.11-2011 OS IN PFUR for graduate school programs in the direction of preparation 36.06.01 "Veterinary medicine and animal science" and the criteria established by the Ministry of Education and Science for scientific qualifying work (thesis) on competition scientific degree of candidate of sciences.

FQW is estimated on the basis of the following criteria:

	Criteria for assessing	the maximum score
1.	The relevance of the research	10

2.	The level of the methodological study of the problem (the theoretical part of the work)	10
3.	The validity of the findings and the degree of validity, the recommendations of the provisions submitted for protection	10
4.	The degree of elaboration of the research problem presented in the introduction of work and abstracts	10
5.	The novelty of the study. The practical significance of the results of the study	10
6.	The methodical apparatus of investigation and a degree of reliability of the results of applied research	10
7.	Level of research methods in the field of scientific specialty	10
8.	recommendations on areas for further research technologies within the perspective of scientific work	10
9.	Originality of findings, conclusions and proposals presented in the text, abstracts and publications, graduate student	10
10.	Scientific knowledge graduate students in answering the questions	10

Table of correspondence points and assessments for certification

<b>The points rating system</b>	<b>Traditional rate in RF</b>	<b>Rate ESTC</b>
95-100	Excellent 5	A
86-94		B
69-85	Good	C

	4	
61-68	Satisfactorily 3	D
51-60		E
31-50	unsatisfactorily	Fx
0-30		F

If the results of the protection of scientific reports, none of the above criteria has not been rated unsatisfactory by most members of the State examination commission and the amount of points exceeds 50, SEC gives a positive assessment of the protection of scientific reports and Agrarian Technological Institute of People's Friendship University draws up an opinion on the recommendations of scientific qualification work ( thesis) to the defense for the degree of candidate of veterinary, biological and agricultural sciences.

Developer:

Associate Professor,

Department of Veterinary Medicine

Director of Department

Veterinary medicine

and animal science



Karamyan A.S.



Vatnikov Yu.A.