«APPROVED»
Member of the Management Board,
Vice-Rector for Academic Affairs
NJSC «Al-Farabi KazNU»
_____Kazmagambetov A.G.
«____» _____ 2025

The program of
the entrance exam for the group of educational programs of the Faculty of Mechanics and mathematics
for the master's degree
for foreign citizens to study on a paid basis

1. General Provisions

1.1 The program was drawn up in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018, No. 600 «On approval of the Model Regulations for admission to studies in educational organization, implementing educational programs of technical and vocational education» (hereinafter – the Standard Rules).

1.2. Kazakh National University named after al-Farabi accepts individuals who have completed higher education programs for postgraduate education programs (master's degree).

1.3. Entrance exams are conducted in the form of interviews for the following educational programs:

- ✓ 7M05402 – Mathematics
- ✓ 7M055401 – Actuarial Mathematics
- ✓ 7M05408 – Computer Science and Statistics
- ✓ 7M06106 – Mathematical and Computer Modeling
- ✓ 7M05404 – Mechanics
- ✓ 7M05405 – Mechanics and Energy (UL, France)
- ✓ 7M05409 - Applied and Computational Mathematics
- ✓ 7M07119 – Space Engineering and Technology
- ✓ 7M07118 – Robotics Systems

1.4. For the organization and conduct of entrance exams for the admission of foreign applicants, an examination subject commission for the academic year is established by the rector of al-Farabi Kazakh National University.

The examination commission for the admission exams of foreign applicants to KazNU includes employees of the Department of Internationalization and Recruitment (hereinafter referred to as the Department) and the teaching staff of KazNU.

1.5. If a foreign applicant who meets the above-mentioned requirements is unable to come to the University for the entrance interview, they have the option to take it in an online format.

1.6. Entrance exams in the form of oral interviews for the admission of foreign applicants are evaluated on a 100-point scale. For admission to the master's program on a fee-paying basis, a minimum of 75 points is required for the academic and pedagogical track (2 years) and a

minimum of 50 points for the specialized track (1-1.5 years).

1.7. Following the entrance interview, a protocol is prepared in the established format. The interview protocol is signed electronically via the "Salem Office" system by the chairperson and all attending members of the commission and then submitted to the Department.

1.8. The decision on admission is reviewed by the competition commission for the enrollment of foreign applicants and documented by a protocol through the "Salem Office " system. The results of the entrance exam are announced on the day of the exam.

1.9. Retaking the entrance exam is not allowed.

1.10. Appeals regarding the results of the interview are allowed within 24 hours.

2 Conducting the entrance exam in 2025:

2.1 The interview is conducted in Russian, Kazakh, and English languages. The oral interview also includes questions aimed at assessing the applicant's ability to learn, creative activity, critical thinking, and personal qualities.

2.2. An indicative list of interview topics:

1. Number sequences
2. Properties of convergent number sequences
3. The concept of functions. Limit of functions and continuity of functions.
4. Taylor formula for a function of one variable
5. The concept of a definite integral
6. Number series. Convergence of number series and their properties.
7. Functional and power series.
8. Green's formula for a two-fold integral.
9. General probability space. Classical and geometric definition of probabilities.
10. Conditional probability. Formula for the product of probability.
11. Total probability formula. Bayes' formula.
12. Random variables. Laws of distribution of random variables.
13. Mathematical expectation of random variables. Dispersion.
14. Distribution function of a random variable and their properties.
15. Law of large numbers. Markov and Chebyshev inequalities.
16. Central limit theorems.
17. Matrices. Basic operations on matrices and their properties. Determinants and their properties. Determinant of the sum and product of matrices. The concept of an inverse matrix.
18. The concept of linear space and its basis. Subspace dimension.
19. Real and complex Euclidean space, Cauchy-Bunyakovsky inequality.
20. The concept of a vector and linear operations on vectors. Linear independence, linear dependence of a system of vectors, basis, affine coordinate system, point coordinate.
21. Equations of a line on a plane, the distance from a point to a line, the relative position of lines on a plane.
22. Equation of lines in space and their relative positions in space.

23. Equation of planes in three-dimensional spaces and their relative positions

24. Second-order surfaces in space, their general equation and simple equation, classification of second-order surfaces in space.

25. Reducing the matrix to Jordan form.

26. Fundamental system of solutions to a homogeneous linear differential equation of the nth order with constant coefficients.

27. Inhomogeneous differential equation of the nth order with constant coefficients.

28. Systems of homogeneous linear differential equations, properties of solutions.

29. Ostrogradsky-Liouville formula.

30. Inhomogeneous linear systems of differential equations. Method of variation of constants (Lagrange method).

31. Subject of theoretical mechanics, basic concepts and definitions. Kinematics of a point and a rigid body. Methods for specifying the movement of a point. Speed and acceleration in curved motion. Decomposition of acceleration along the axes of a natural trihedron.

32. Mechanical system. Translational motion of an absolutely rigid body. Trajectories of points, speed, acceleration during translational motion of a rigid body.

33. Rotational motion of an absolutely rigid body around a fixed axis. Angular velocity and angular acceleration. Velocities and accelerations of points during rotation of a rigid body. Euler's formula.

34. Plane-parallel motion of an absolutely rigid body. Two representations of plane-parallel motion of a rigid body. Velocities and accelerations of points of a flat figure. Instantaneous centers of velocities and accelerations.

35. Movement of a rigid body around a fixed point. Euler angles. Euler's kinematic equations. Euler–D'Alembert theorem. Velocities and accelerations of points of a body moving near a fixed point.

36. Complex motion of a rigid body. Reduction of a system of sliding vectors. The main vector and the main moment. Reduction invariants of a sliding vector system. Screw. Movement of a free rigid body. Chall's theorem. Velocities and accelerations of points of a free rigid body.

37. Complex movement of a point. Absolute, relative, portable motion. Theorem on the addition of velocities. Coriolis theorem.

38. Basic definitions and axioms of statics. Moment of force about the center. Moment of force about the axis.

39. System of converging forces. Conditions for equilibrium of a system of converging forces. Parallel force system. Equilibrium conditions, equivalent equilibrium conditions. Center of gravity. Methods for finding the center of mass.

40. Theory of pairs. A system of forces arbitrarily located in space. Equilibrium conditions for various systems of forces. Statically indeterminate systems.

41. Dynamics of a point and a system of material points. Rectilinear oscillations of a point (harmonic, damped, forced). Differential equations of motion of a system of material points.

42. General theorems on the dynamics of a point. Basic dynamic quantities of the system. General theorems of system dynamics.

43. Types of connections. Elementary work of force. The work of gravity, elastic force, friction force. Basic concepts.

44. Virtual and true movements. Variation of coordinates. Number of degrees of freedom.

45. Generalized coordinates, velocities and forces. Conditions imposed by connections on coordinate variations. The principle of possible movements.

46. D'Alembert's principle. General theorems derived from d'Alembert's principle. D'Alembert-Lagrange principle.

47. Lagrange multiplier method. Lagrange equations of the 1st kind. Holonomic and nonholonomic systems. Determination of reactions using Lagrange equations of the 1st kind.

47. Lagrange multiplier method. Lagrange equations of the 1st kind. Holonomic and nonholonomic systems. Determination of reactions using Lagrange equations of the 1st kind.

48. Lagrange equations of the second kind. Lagrange equations for a system under the influence of potential forces. Lagrange function. Energy integral.

49. Kinematics of a continuous medium. Equations of motion of particles of a continuous medium. Lagrange and Euler methods for studying the motion of a continuous medium and their relationship. Scalar and vector fields and their main characteristics. Trajectory, streamline, vortex line and their differential equations. Jet, current tube, vortex tube.

50. Deformation theory. Elongation coefficient. Strain tensor. The geometric meaning of its components. Invariants of the deformation tensor. Volume expansion coefficient. Condition for compatibility of deformations. Strain rate tensor. Cauchy-Helmholtz formula and theorem.

51. Basic theorem and equation of continuum dynamics. Weight. Density of the medium. Law of conservation of mass. Continuity equation and Lagrange and Euler variables. Mass and surface forces. Stress tensor. Theorem on the change in the momentum of a medium. Equations of dynamics in “stresses”.

52. Equations of equilibrium of the medium. Theorem on the change in the angular momentum of a medium. Symmetrical and asymmetrical stress tensors. Kinetic energy. Theorem on the change in kinetic energy of the medium.

53. Classical models of continuous media. Model of an ideal incompressible fluid. Euler's equations. Model of an ideal gas in a barotropic process. Model of a viscous incompressible fluid. Navier–Stokes equations. Viscous gas model. Complete system of equations.

54. Model of an elastic body. Equations of state for isothermal and adiabatic processes and generalized Hooke's law. A complete system of basic equations of the linear theory of elasticity. Lamé's equations. Model of a thermoelastic body. Hooke's law taking into account temperature stresses. Model of an ideal plastic body.

55. Basics of hydrostatics. Equilibrium equations for liquids and gases. Equilibrium in the field of gravity. Equilibrium of a homogeneous incompressible heavy fluid. Equilibrium of a perfect gas in a gravity field. Archimedes' law.

56. General theory of motion of ideal liquids and gases. Equations of motion of an

ideal medium in the Gromeki-Lemb form. Bernoulli's theorem and integral. Examples of applications of the Bernoulli integral.

57. Energy equation for adiabatic motion of an ideal gas. Enthalpy. Energy integral and its application. Velocity of propagation of small disturbances in an ideal gas. Sound speed. Newton's and Laplace's formulas. Mach number.

58. One-dimensional stationary motion of an ideal gas through a pipe of variable cross-section. Elementary theory of the Laval nozzle. An example of a plane stationary shock wave. Hugoniot equation.

59. Irrotational motion of an ideal medium. Speed potential. Lagrange-Cauchy integral. Plane irrotational motion of an ideal incompressible fluid. Current function. Application of the function theorem of complex variables. Complex potential. Examples of the simplest flows.

60. Dynamics of a viscous incompressible fluid. Navier-Stokes equation of viscous fluid dynamics in dimensionless variables. Dimensionless parameters and their meaning. Reynolds number.

61. Movement of a viscous incompressible fluid in a round pipe. Poiseuille's law. Examples of the simplest flows at low Reynolds numbers. Features of flow at high Reynolds numbers. The concept of the boundary layer. Prandtl's equations. Blasius problem.

62. Laminar and turbulent movements. Reynolds' experience. Reynolds equation of averaged turbulent motion. Boussinesq formula. Prandtl's hypothesis. Review of other semi-empirical theories of turbulence.

2.3. Recommended reading list for preparation:

1. Ilyin V.A., Poznyak E.G. Fundamentals of mathematical analysis. Part I. Ed.7. – M.: "Fizmatlit", 2014. – 648 p.

2. V.A. Ilyin, E.G. Poznyak. Fundamentals of mathematical analysis. Part II. M.: "Fizmatlit", 2004. – 464 p.

3. B.V. Shabbat. An introduction to complex analysis. Part I. Ed.6. Moscow: "URSS", 2020. – 344 p.

4. A.N. Kolmogorov, S.V. Fomin. Elements of the theory of functions and functional analysis. M.: Publishing house "Fizmatlit", 2004. – 572 p

5. A.V. Pogorelov. Differential geometry. Moscow: URSS Publishing House, 2022. – 184 p.

6. N. Akanbai. Yktimaldyktar theory. (I – bolim) Almaty: "Kazakh University", 2001. 296 bet.

7. N.S. Kremer. Probability theory and mathematical statistics. M.: "UNITY", 2000. 544 p.,

8. B.E. Kanguzhin. The theory of functions of a complex variable. Lectures. Practical exercises. Tests: A textbook. Almaty: Kazakh University, 2007. 186 C.

9. S.A. Badaev. Syzyk algebra is an analytical geometry. Almaty: "Kazakh University", 2010. 258 bet.

10. V.A. Ilyin, E.G. Poznyak. Linear algebra. Ed.6. – M.: "URSS" 2020. – 280 p.

11. V.A. Ilyin, E.G. Poznyak. Analytical geometry. M.: "Physatlit" 2017. – 224 p.

12. A.I. Kostrikin. Introduction to algebra. Part III. (Basic structures). M.: Fizmatlit, 2001. 271 P.

13. Zhusip Suleyman. Differentialdyk tengdeuler courses. Okulyk. Almaty: "Kazakh University", 2009.- 440 b.

14. N.M.Matveev. Methods of integration of ordinary differential equations" 4th ed.Minsk: "Higher School". 1974. 768 p.

15. J.A. Tokybetov, E.M. Khairullin. Mathematicalyk Physics teideuleri. KazUTU, Almaty: 1995. 297 bet .

16. A.N. Tikhonov, A.A. Samarsky. Equations of mathematical physics. Moscow: Nauka Publishing House 2004. 798 P.

17. Sultangazin, S. Atanbayev. Yesepteu adisterinin kiskasha theory. 1-kitap (Katelikter theory). Algebralyk teideulerdi sheshu adisteri zhane zhuyktular) Almaty: "Bilim". 1995. 272 bet.

18. Sultangazin, S. Atanbayev. Yesepteu adisterinin kiskasha theory. 2-kitap (Differentialdyk zhane integraldyk teideulerin sandyk sheshu adisteri) Almaty: "Bilim". 2001. 287 bet.

19. Isaiah Lankham, Bruno Nachtergaele, Anne Schilling. Linear Algebra As an Introduction to Abstract Mathematics. Copyright c 2007 by the authors. pp. 246

20. S.A. Badaev. Syzyk algebra is an analytical geometry. 1-bolim.

21. S.A. Badaev. Syzyk algebra is an analytical geometry. 2-bolim.

22. S.A. Badaev. Syzyk algebra is an analytical geometry. 3-bolim. Syzyktyk operatorlar zhane sharshylyk tulgalar.

23. A.Y. Omarov, P.T. Dosanbai, S.S. Zaurbekov. Mathematicalyk logic is not an algorithmic theory.

24. Ibrashev Kh.I., Yerkegulov Sh.T. Matematikalyk analysis courses. Almaty. Mektep, Vol.1,2. 1963-1970.

25. Zhautikov O.A. Matematikalyk analysis courses. Almaty. Mektep, 1958.

26. Akhmetkaliev E. Matematikalyk taldau. Almaty, RBK, 1997.

27. Bulabaev T., Matakaeva G. Matematikalyk taldau negizderi. Almaty, Kainar, 1996.

28. Tokibetov Zh.A., Khairullin E.M. Mathematikalyk physics tendeuleri. Almaty, 1995.

29. Sakhaev Sh.S.,,Matematikalyk physics teideuleri" Oku kuraly, „Kazakh University" 2007 J. Kolemi-270 bet.

30. Orynbasarov M.O., Orshubekov N.A. "Mathematikalyk physics teideuleri" Almaty, "KU" 2009.-320 p.

31. Orynbasarov M.O., Sakhaev Sh. "ITF esepteri men zhattygular zhinagi". Almaty, "KU" 2009.-230 b.

32. Suleimenov Zh. Differentialdyk tendeuler courses, Okulyk. Almaty, Kazakh University, 2009.- 440 b.

33. Kadykenov B.M. Differentialdyk teideulerdin yesepteri men zhattygulary. Almaty, 2002.

34. Nauryzbayev K.Zh., National analysis, Almaty, "Kazakh University",2004.

35. Temirgaliev N.T., Mathematikalyk analysis, vol. I-III, 1987.1991 zh.zh.

36. Kolmogorov A.N., Fomin S.V., Elements of the theory of functions and functional analysis. – M.: "Lan", 2009. – 572 p.

37. Lyusternik L.A., Sobolev V.I. A short course in functional analysis. – M.: "Lan", 2009. – 272 p.

38. Trenogin V.A. Functional analysis. - M.:Fizmatlit, 2002. – 488 p.

39. N. Akanbai. Yktimaldyktar theory (I – bolim) – Almaty.: "Kazakh University", 2001. 296 bet.

40. N. Akanbai Yktimaldyktar theoriyasyn yesepteri men zhattygularynyn zhinagi – Almaty,: "Kazakh University", 2004. 377 bet.

41. N.Akanbai. Yktimaldyktar theory (3-boim). Almaty.: "Kazakh University", 2007, 297 bet.

42. N.Akanbai. Yktimaldyktar teoriyasyn yesepteri men zhattygularyn zhinagi (3-bolim). Almaty.: "Kazakh University", 2007, 256 bet.

43. N.Akanbai. Yktimaldyktar theory (2-boim). Almaty.: "Kazakh University", 2006, 368 bet.

44. N.Akanbai. Yktimaldyktar teoriyasyn yesepteri men zhattygularyn zhinagi (2-bolim). Almaty.: "Kazakh University", 2007, 332 bet

45. Trenogin V.A., Pisarevsky B.M., Soboleva T.S. Tasks and exercises in functional analysis. – M.: URSS, 2005. – 240 p.

46. Yoshida K., Functional analysis. – M.: "Mir", 1967. – 624 p.

47. Kantorovich L.V., Akilov G.P. Functional analysis. – M.: BHV, 2004. – 816 p

48. Sadovnichy V.A. Theory of operators. – M. "Higher School", 2004.

49. Natanson I.P., Theory of functions of a real variable, M.: Nauka, 1974. – 480 p.

50. Sevastyanov B.A. Probability theory and mathematical statistics. M.: "URSS", 2022. – 256 p

51. Gnedenko B.V. Course of probability theory and mathematical statistics. M.: "URSS", 2022. – 456 p

52. Kremer N.S. Probability theory and mathematical statistics. M.: UNITY, 2000. 544 p.,

53. Agapov G.I. Problem book on probability theory. M.: "Higher school", 1994. – 112 p.

54. V.A. Kolemaev, O.V. Staroverov, V.B. Turundaevsky Probability theory and mathematical statistics – M.: "Higher School", 1991. – 400s.

55. N. Akanbai, Z.I. Suleimenova, S.K. Tapeeva Yktimaldyktar theory, zhane mathematikalyk statistikadan test suraktary, Almaty, "Kazakh University", 2005 J., 254 bet.

56. Krasnov, M.L. Ordinary differential equations M.: URSS, 2002.- 253 p.

57. Fedoryuk, M.V. Ordinary differential equations : 3rd edition, ster.- St. Petersburg: Lan, 2003. - 447 p.

58. Filippov, A.F. Collection of problems on differential equations : Ed. 2-E.- M.: LKI Publishing House, 2008.- 235 p

59. Butenin N.V., Lunts Ya.L., Merkin D.R. Course of theoretical mechanics. - 11th ed., ster. – S-Pb: Lan, 2009. – 736 p

60. Buchholz N.N. The basic course of theoretical mechanics. Part 1. – 10th ed., ster. – S-Pb: Lan, 2009. – 480 p.

61. Buchholz N.N. The basic course of theoretical mechanics. Part 2. – 7th ed., ster. – S-Pb: Lan, 2009. – 336 p

62. Markeev A.P. Theoretical mechanics. – M.-Izhevsk: SIC "Regular and chaotic dynamics", 2001. – 592 p.

63. Yablonsky A.A., Nikiforova V.M. Course of theoretical mechanics. Statics, kinematics, dynamics. – M.: KnoRus, 2011. – 608 p.

64. Borisov A.V., Mamaev I.S. Dynamics of a solid body. – M.-Izhevsk: SIC RCD, 2001. – 384 p.

65. Polyakhov N.N., Zegzhda S.A., Yushkov M.P. Theoretical mechanics. – M.: Higher School, 2000. – 592 p.

66. Rabotnov Yu.N. Mechanics of a deformable solid. – M.: Nauka, 1988. – 712 p.

67. Klyushnikov V.D. Physical and mathematical foundations of strength and plasticity. – M.: Moscow State University, 1994. – 190 p.

68. Feodosiev V.I. Resistance of materials. – M.: Publishing house of MSTU, 1999. - 592 p.

69. Darkov A.V., Shaposhnikov N.I. Construction mechanics. – M.: Nauka, 1986. – 368 p.

70. Smirnov A.F. Construction mechanics. Dynamics and stability of structures. – M.: Nauka, 1984. – 413 p.

71. Babakov N.M. Theory of oscillations. – M.: Bustard, 2004. – 591 p.

72. Timoshenko S.P. Strength and vibrations of structural elements. – M.: Nauka, 1975. – 704 p.

73. Betchelor J. Introduction to fluid dynamics. – Moscow-Izhevsk; SIC "Regular and chaotic dynamics", 2004. – 768 p.

74. Sedov L.I. Mechanics of a continuous medium: In 2 vols. Vol. 1. 6th ed. erased. - St. Petersburg: Publishing house "Lan", 2004. – 528 p.

75. Sedov L.I. Mechanics of a continuous medium: – In 2 vols. Vol. 2. 6th ed. erased. – St. Petersburg: Lan Publishing House, 2004. – 560c.

76. Loitsyansky L.G. Mechanics of liquid and gas: Textbook for universities. 7th ed. ispr. – M.: Bustard, 2003. – 840s.

77. Ilyushin A.A. Mechanics of a continuous medium. – M.: Moscow State University, 1990. – 310 p.

78. Maze J. Theory and problems of continuum mechanics. – M.: Publishing House LKI. 2007. - 320 p.

79. Veretennikov V.G., Sinitsyn V.A. Theoretical mechanics (additions to general sections). – M.: Publishing House of MAI, 1996. – 360 p.

80. Golubev Yu.F. Fundamentals of theoretical mechanics. – M.: Publishing House of Moscow State University, 2000. – 719 p.

81. Loitsyansky L.G., Lurie A.I. Course of theoretical mechanics. In 2 volumes. – S-Pb: Lan, 2006. – Part 1: Statics, kinematics. – 352 p. – Part 2: Dynamics. – 640 p.

82. Lidov M.L. Course of lectures on theoretical mechanics. – M.: Fizmatlit, 2010. – 496 p.

83. Arkhangelsky Yu.A. Analytical dynamics of a solid body. – M.: Nauka, 1977. 328 p.

84. Landau L.D., Lifshits E.M. Hydromechanics. – M.: Nauka, 1986. –

85. Germain P. Course of continuum mechanics. General theory. – M.: Higher School, 1983.-399 p.

86. Monin A.S., Yaglom A.M. Statistical hydromechanics. – M.: Nauka. 1965. part 1. 639c.

87. Pope S.B. Turbulent Flows, – Cambridge University Press, Cambridge, UK, 2000. – 771 p.

88. Robert W. Fox, Alan T. McDonald, Philip J. Pritchad. Introduction to Fluid Mechanics, International Student Version. – 8th Edition, John Wiley&Sons Inc., 2011. – 896 p.

89. Kuznetsov V.R., Sabelnikov V.A. Turbulence and gorenje. Moscow: Nauka, 1986. – 287 p.

90. Kernstein I.M. et al. Fundamentals of experimental mechanics of destruction. – M.: Moscow State University, 1989. – 140 p.

91. Rabotnov Yu.N. Introduction to the mechanics of destruction. – M.: URSS, 2022. – 80s.

92. Parton V.Z. Mechanics of destruction. From theory to practice. – M.: Nauka, 1990. – 240 p.

3. Scale and criteria for evaluating the entrance exam for admission to the master's program (specialized track) for foreign citizens on a fee-paying basis:

Number of points	Compliance criteria
90-100 points «Excellent»	All competencies required for the entrance exam have been mastered. A comprehensive answer has been provided to two theoretical questions: - Scientific terminology has been correctly utilized. - All necessary features, elements, grounds, and classifications have been accurately named and defined to substantiate the arguments. - The main viewpoints accepted in scientific literature regarding the discussed issue have been indicated. - Own position or viewpoint has been argued, and the most significant research problems in this field have been identified. - The practical problem has been solved correctly with all necessary explanations.
75-89 points «Good»	All competencies required for the entrance exam have been mastered. A correct answer has been provided to two theoretical questions, with minor deficiencies identified in preparation: Scientific terminology is applied. - All necessary features, elements, classifications are named, but there is an error or inaccuracy in the definitions or concepts. - There are shortcomings in argumentation, factual or terminological inaccuracies are present, but they are not significant. - Some insights into possible research problems in the field are expressed. - The practical problem is partially solved with incomplete explanations provided.
50-74 points «Satisfactory»	All competencies required for the entrance exam have been mastered. A correct answer has been provided to two theoretical questions, with minor deficiencies identified in preparation: - Only some grounds, features, characteristics of the phenomenon under consideration are named and defined.

	- Significant terminological inaccuracies are present. - Own viewpoint is not presented. - No insights into possible research problems in the field are provided. - The practical problem is not solved.
0–49 points «Unsatisfactory»	Not all competencies required for the entrance exam have been mastered. Incorrect answers are provided to two theoretical questions, with significant deficiencies identified in preparation. The practical problem is not solved.

3.1 Scale and assessment criteria of the entrance examination for admission to the master's program (academic and pedagogical direction) for foreign citizens on a fee-paying basis:

Number of points	Compliance criteria
90–100 points "Excellent"	Demonstrates knowledge of the fundamental processes within the studied subject area; depth and completeness of addressing the issue; logically and sequentially expresses own opinion on the discussed problem; possesses conceptual-categorical framework, scientific terminology; logical coherence of the answer, adherence to the norms of contemporary scientific language.
80–89 points "Good"	Competent use of scientific terminology; mastery of conceptual-categorical framework; problem-oriented presentation of formulated questions; occasional errors in presenting factual material; incompleteness in presenting scientifically established facts within the scope of questions; logical coherence of the answer, adherence to the norms of contemporary scientific language.
75–79 points "Satisfactory"	Insufficient use of scientific terminology; inadequate mastery of conceptual-categorical framework; ability to address only one of the problems formulated in the questions; errors in presenting factual material; superficial knowledge of the subject area; violation of logical coherence in the answer, norms of contemporary scientific language.
0–74 points "Unsatisfactory"	Absence of necessary scientific terminology in the answers; descriptive presentation of discussed issues, inability to identify and present problems; gross errors in presenting factual material; lack of knowledge of historiography of the studied subject area.