



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal state autonomous educational institution
of higher education
«Far Eastern Federal University»
(FEFU)

INSTITUTE OF LIFE SCIENCES AND BIOMEDICINE (SCHOOL)

AGREED

Head of OP

Kalenik T.K.
(signature) (full name)
«28» September 2021 г.

APPROVE

Head of VSP

Kalenik T.K.
(signature) (full name)
«28» September 2021 г.

WORKING PROGRAM OF THE DISCIPLINE

The international legal framework for ensuring the safety and quality of agricultural raw materials and food products
Direction of training 19.04.01 «Biotechnology»
(«Agri-Food Biotechnology»)
Form of training full-time

course 2 semester 3
lectures 9 hours.
practical classes 27h.
laboratory work 00 hours.
including using
total classroom hours 36 hours.
independent work 72 h.
including preparation for the exam 00 hours (if the exam is provided).
control works (quantity) are not provided
term paper / term project are not provided
credit 3 semester
exam not included

The program of the state final certification was compiled in accordance with the requirements of the Federal State Educational Standard in the field of study 19.04.01 Biotechnology, approved by order of the Ministry of Science and Higher Education of the Russian Federation dated August 10, 2021 No. 737.

The program at the meeting of the Academic Council of the Institute of Life Sciences and Biomedicine (School) December 21, 2021
Director of the Department of Food Science and Technology Kalenik T.K.
Compiled by: T.K. Kalenik, Motkina E.V.

Reverse side of the title page of the RPMU

I. The work program was revised at the meeting of the department:

Protocol dated « _____ » _____ 20__ № _____

Director _____

(signature)(full name)

II. The work program was revised at the meeting of the department:

Protocol dated « _____ » _____ 20__ № _____

Director _____

(signature)(full name)

III. The work program was revised at the meeting of the department:

Protocol dated « _____ » _____ 20__ № _____

Director _____

(signature)(full name)

IV. The work program was revised at the meeting of the department:

Protocol dated « _____ » _____ 20__ № _____

Director _____

(signature)(full name)

ABSTRACT

Bachelor's degree in 19.04.01 Biotechnology

Study profile «Agri-food biotechnology».

Course title: The international legal framework for ensuring the safety and quality of agricultural raw materials and food products.

Variable part of Block, 3 credits

At the beginning of the course a student should be able to:

- the ability to search, store, process and analyze information from various sources and databases, to represent it in the required format using the information, computer and network technologies;

- the ability to use modern methods and technologies (including information) in their professional activities.

SPC - 9 - readiness to use the basic principles of the organization of metrological ensuring production;

SPC - 11-ability to provide technological discipline, sanitary and hygienic working hours of the enterprise, the maintenance of processing equipment in appropriate technical condition;

SPC - 12-ability to plan and hold events for providing safety measures on production, on monitoring and environment protection;

SPC - 15-readiness to provide stability of indicators of production and quality of products.

Course description: The content of the course covers the following range of issues: the legislation and technical regulation in safety issues of food products, standard ensuring agrofood production at all stages.

Main course literature:

1. Systems, methods and tools of quality management: a textbook for universities / M. M. Kane, B. V. Ivanov, V. N. Koreshkov [and others]; [ed. M.M. Cane]. St. Petersburg: Peter, 2009, 559 p. (5 copies)

<http://lib.dvfu.ru:8080/lib/item?id=chamo:276431&theme=FEFU>

2. Food security (in the world and in Russia) / V.I. Nazarenko; Russian Academy of Sciences, Institute of Europe. Moscow: Monuments of historical thought, 2011. - 285 p. (1 copy)

<http://lib.dvfu.ru:8080/lib/item?id=chamo:662344&theme=FEFU>

3. Expertise of specialized foods. Quality and safety: a textbook for universities / [L. A. Mayurnikova, V. M. Poznyakovsky, B. P. Sukhanov, and others]; under total ed. V.M. Poznyakovsky. St. Petersburg: GIORD, 2012. - 421 p.

(10 copies) <http://lib.dvfu.ru:8080/lib/item?id=chamo:664633&theme=FEFU>

Form of final knowledge control: offset

1. Purpose and objectives of mastering the discipline:

The purpose of studying the discipline is to master the general principles, methods and procedures of the international legal framework for ensuring the safety and quality of agri-food raw materials and food products, to prepare the student to solve professional problems in achieving quality and work efficiency through the use of methods to ensure the uniformity of measurements, standardization, and also confirm properties and characteristics through certification for compliance with national and international standards.

Objectives of the discipline:

1. familiarization with legislative and regulatory acts in the field of the international legal framework for ensuring the safety and quality of agri-food raw materials and food products;

2. the development of basic terms and definitions on the international legal framework for ensuring the safety and quality of agricultural raw materials and food products;

3. the study of the goals, objectives, principles, objects, subjects of the international legal framework for ensuring the safety and quality of agri-food raw materials and food products.

As a result of studying this discipline, students form the following professional competencies (elements of competencies).

Code and wording of competency	Competency Stages	
SPC - 9 - readiness to use the basic principles of the organization of metrological ensuring production	Knows	basic principles of organization of metrological support of production
	Is able	use the basic principles of organization of metrological support of production
	Owens	principles of organization of metrological support of production
SPC - 11-ability to provide technological discipline, sanitary and hygienic working hours of the enterprise, the maintenance of	Knows	rules of technological discipline, sanitary and hygienic regime of the enterprise, maintenance of technological equipment in proper technical condition
	Is able	ensure technological discipline, sanitary and hygienic mode of operation of the enterprise, maintenance of technological equipment in proper technical condition

processing equipment in appropriate technical condition	Owns	the principles of ensuring technological discipline, the sanitary and hygienic regime of the enterprise, the maintenance of technological equipment in proper technical condition
SPC - 12-ability to plan and hold events for providing safety measures on production, on monitoring and environment protection	Knows	norms for planning and carrying out measures to ensure safety at work, to monitor and protect the environment
	Is able	plan and carry out activities to ensure safety at work, to monitor and protect the environment
	Owns	the practice of planning and carrying out measures to ensure safety at work, to monitor and protect the environment
SPC - 15-readiness to provide stability of indicators of production and quality of products	Knows	rules for ensuring the stability of production indicators and the quality of products
	Is able	ensure the stability of production indicators and product quality
	Owns	principles and practice of ensuring the stability of production indicators and the quality of products

2. The complexity of the discipline and types of training sessions in the discipline

The total labor intensity of the discipline is 3 credit units (108 academic hours).

The types of training sessions and work of the student in the discipline can be:

Designation	Types of training sessions and work of the student
Lec	Lectures
Lab	Labs
Pe	Practical exercises
Oc	Online course
SR	Independent work of the student during the period of theoretical training
Control	Independent work of the student and contact work of the student with the teacher during the period of intermediate certification

Discipline structure:

The form of education is full-time.

№	Section named disciplines	Semester	The number of hours by type of training sessions and work of the student						Forms of intermediate certification, current monitoring of progress
			Lec	Lab	Pe	Oc	SR	Control	
1	Section 1. The international legal framework for ensuring the safety and quality of agricultural raw materials and food products	3	5		10	0	72	0	Seminar, credit
2	Section 2. Standardization is an instrument of technical regulation.	3	4		17				Seminar, credit
Total:			9	0	27	0	72	0	

3. STRUCTURE AND CONTENT OF THE THEORETICAL PART OF THE COURSE

(9hours)

Section 1. The international legal framework for ensuring the safety and quality of agricultural raw materials and food products / Hardware and software of biotechnological production

The section provides the basic concepts: international legal framework, scope, objects, subjects; the principles of technical regulation abroad are considered, aimed at ensuring the safety and quality of goods, works and services, as well as existing forms of conformity assessment, signs and documents informing the consumer about the products passing the conformity confirmation procedure. Metrology, standardization and certification are presented as instruments of technical regulation; their interconnection is shown, which is manifested in the process of ensuring the quality of goods, works and services.

Lecture 1

Technical regulation in the food industry abroad. Basic concepts of technical regulation. Basic principles of technical regulation. Legal basis of technical regulation.

Lecture 2

Consumer rights Protection. The legal regime for the sale of goods to consumers. Consumer protection in the performance of work (provision of services). State and public consumer protection.

Legal regulation of relations in the field of quality and food safety. The turnover of food products, materials and products.

Section 2. Standardization is an instrument of technical regulation. The international standardization system in the Russian Federation. System complexes of standards. The system of development and putting products into production

The section considers standardization methods: the systematization method as a form of ordering objects, typification as the basis for improving the quality and universality of products, parametric standardization as the basis for creating parametric series of products. Attention is drawn to the sequence of work on unification. The advantages of aggregation, integrated and advanced standardization are analyzed. The section discusses the rules of organization of work on standardization: goals, objectives, principles, the main results of work on standardization, the main stages of work on standardization. The main terms and concepts in the field of standardization are analyzed: the object and scope of standardization, regulatory documents and their categories, standards and their types, levels of standardization work abroad. The official sources of information on the standards in force at the time of the appeal are indicated. The types of regulatory documents search are considered. Particular attention is paid to the procedure of state control (supervision) over compliance with the requirements of national standards and technical regulations, as well as the sanctions applied in case of violation of the requirements of the regulations.

Lecture 1

The main methods of standardization. Typing, unification and aggregation are the basic elements for improving product quality. Interchangeability and compatibility are the basis of unification, normalization, standardization. Preferred number system and parametric series.

Lecture 2

Intersectoral systems (complexes) of standards. The main provisions of the quality assurance system. Environmental standardization, product safety requirements for the life and health of consumers, as well as for the environment.

Lecture 3

The main provisions of the SRPP. Terms and Definitions. The main stages and stages. Product development process: terms of reference, scientific research. Development of design documentation, development of working documentation, types of product samples, development of draft documentation accompanying products, types of product testing, delivery and acceptance of development to the customer. Production process: production setting. on production, the development of industrial production, established production, removal of products from production. Aims and tasks of the developer in the process of development and putting products into production.

4. STRUCTURE AND CONTENT OF THE PRACTICAL PART OF THE COURSE

(Practical classes 27 hours)

Lesson 1. Quality of food industry products. Quality and safety as the main properties of products

1. ISO standards 9000 series.

Lesson 2. The procedure for the development and implementation of standards in the food industry

Lesson 3. “Food safety management system” - ISO 22000. HACCP system

Lesson 4. Quality control carried out at enterprises. Quality control of food products

1. Organoleptic indicators of the quality of food products
2. Physico-chemical indicators of the quality of food products
3. Microbiological indicators of the quality of food products

4. Food Safety Indicators
5. The program of production control in the food industry

Lesson 5. General scheme of technochemical control

1. HACCP and GMP food quality and safety systems.
2. Planning an experiment. The choice of analysis method.
3. The concept of method, methodology.
4. Sampling and storage. General, laboratory and analyzed samples.
5. Processing the results of the analysis.
6. Modern methods for determining quality indicators.
7. Modern methods for determining the composition and properties of the studied samples.
8. Instrumentation.

Lesson 6. Organizational basis of production control

1. Organization of a factory laboratory (department of production and veterinary control).
2. The main tasks of the laboratory. Its structure and equipment.
3. General issues of organization of production control at enterprises.
4. Types and methods of monitoring. Input control. Control of finished products.
5. Basic, single and comprehensive indicators of product quality.

Lesson 7. Development of the HACCP system for a specific agri-food production

5. TRAINING AND METHODOLOGICAL SUPPORT OF STUDENTS'S INDEPENDENT WORK

Educational and methodological support for the independent work of students in the discipline "The international legal framework for ensuring the safety and quality of agricultural raw materials and food products" is presented in Appendix 1 and includes:

- a schedule of independent work on the discipline, including approximate norms of time to complete each task;
- characteristics of tasks for independent work of students and guidelines for their implementation;
- requirements for the presentation and presentation of the results of independent work;
- criteria for evaluating the performance of independent work.

6.CONTROL OF ACHIEVING COURSE OBJECTIVES

№	Supervised sections / topics of discipline	Codes and stages of formation of competencies		EvaluationTools	
				currentcontrol	intermediatecertification
1	Section 1. The international legal framework for ensuring the safety and quality of agricultural raw materials and food products / Hardware and software of biotechnological production	SPC-9 SPC-11 SPC-12 SPC-15	Knows how to manage the quality, safety and traceability of the production of biotechnological products	QuestionstoColloquiumNo. 1-5	questionsforoffset 1-5
			Able to apply methods of quality management, safety and traceability of the production of biotechnological products	QuestionstoColloquiumNo. 6-10	questionsforoffset 6-15
			Owens how to manage the quality, safety and traceability of the production of biotechnological products	QuestionstoColloquiumNo. 11-14	standings 16-20 Testing
2	Section 2. Standardization is an instrument of technical regulation. System complexes of standards. The system of development and putting products into production	SPC-9 SPC-11 SPC-12 SPC-15	Knows how to manage trials and implement new biotechnologies and new biotech products	QuestionstoColloquiumNo. 15-16	questionsforoffset 21-27
			Can apply test management and implementation techniques for new biotechnologies and new biotech products	QuestionstoColloquiumNo. 17-19	questionsforoffset 28-32
			Owens how to manage trials and implement new biotechnologies and new biotechnological products	Questions to Colloquium No. 17-19, Test	Questionsfor offset 33-38

Control and methodological materials, as well as criteria and indicators necessary for assessing knowledge, skills, and characterizing the stages of formation of competencies in the process of mastering the educational program are presented in Appendix 2.

7. LIST OF TRAINING LITERATURE AND INFORMATION AND METHODOLOGICAL SUPPORT OF DISCIPLINE

Main literature

(electronic and print editions)

1. Systems, methods and tools of quality management: a textbook for universities / M. M. Kane, B. V. Ivanov, V. N. Koreshkov [and others]; [ed. M. M. Cane]. St. Petersburg: Peter, 2009, 559 p. (5 copies)
<http://lib.dvfu.ru:8080/lib/item?id=chamo:276431&theme=FEFU>

2. Food security (in the world and in Russia) / V. I. Nazarenko; Russian Academy of Sciences, Institute of Europe. Moscow: Monuments of historical thought, 2011. - 285 p. (1 copy)
<http://lib.dvfu.ru:8080/lib/item?id=chamo:662344&theme=FEFU>

3. Examination of specialized food products. Quality and safety: a textbook for universities / [L. A. Mayurnikova, V. M. Poznyakovsky, B. P. Sukhanov and others]; under the general. ed. V.M. Poznyakovsky. St. Petersburg: GIORD, 2012 .- 421 p. (10 copies)
<http://lib.dvfu.ru:8080/lib/item?id=chamo:664633&theme=FEFU>

Additional literature

(electronic and print editions)

1. Sharipov SV, Tolstova Yu.V. Development and implementation of a quality management system: (Based on the international standard ISO 9001: 2000) M.: Dialog-MIFI, 2002, 168 pp.

<http://lib.dvfu.ru:8080/lib/item?id=chamo:2142&theme=FEFU>

2. Product quality management. Tools and methods of quality management: a textbook for universities / S. V. Ponomarev, S. V. Mishchenko, V. Ya. Bolobragin [et al.]. Moscow: Standards and Quality, 2005, 243 p.

<http://lib.dvfu.ru:8080/lib/item?id=chamo:342747&theme=FEFU>

3. Technical regulation: textbook for universities / [I. Z. Aronov, E. V. Belov, V. G. Versan and others]; under the editorship of V. G. Versan, G. I. Elkin. [Moscow]: Economics, 2008, 678 p.

<http://lib.dvfu.ru:8080/lib/item?id=chamo:351921&theme=FEFU>

4. N.I. Dunchenko, M.D. Magomedov, A.V. Rybin. Quality management in the food industry, Moscow: Dashkov and Co. , 2008, 211 p.

<http://lib.dvfu.ru:8080/lib/item?id=chamo:264834&theme=FEFU>

5. The safety of food raw materials and food: a method. instructions for laboratory work and practical exercises for students special 260204 "Technology of fermentation and winemaking" Pts. and extramural forms of training / [comp. S.V. Zhuravleva, T.A. Shepel, L.A. Tekutieva] Vladivostok: Publishing House of the Pacific Economic University, 2009, 32 pp.

<http://lib.dvfu.ru:8080/lib/item?id=chamo:55860&theme=FEFU>

Regulatory Materials

1. The concept of development of the national standardization system of the Russian Federation for the period until 2020 [Electronic resource]: Approved by Order of the Government of the Russian Federation of September 24, 2012 N 1762-рофициальный: official text: - Access mode: <http://www.garant.ru/>.

2. On the safety of machinery and equipment [Electronic resource]: Technical regulation of the Customs Union TR CU 005/2011: approved. By the decision of the Commission of the Customs Union of October 18, 2011 No. 823 // GARANT: legal information system. - Access mode: <http://www.garant.ru/>.

3. On the safety of meat and meat products [Electronic resource]: Technical regulation of the Customs Union TR CU 034/2013: approved. By the decision of the Commission of the Customs Union of October 9, 2012 No. 68 // GUARANTOR: information and legal system. - Access mode: <http://www.garant.ru/>.

4. On the safety of certain types of specialized food products, including dietary therapeutic and preventive dietary nutrition [Electronic resource]: Technical regulation of the Customs Union TR CU 027/2012: adopted by decision of the Council of the Eurasian Economic Commission dated June 15, 2012 No. 34: officer . text. - Access mode: 1) <http://www.garant.ru/> ; 2) <http://ivo.garant.ru/SESSION/PILOT/main.htm>

5. On food safety [Electronic resource]: Technical regulation of the Customs Union TR CU 021/2011: approved. By the decision of the Commission of the Customs Union of December 9, 2011 No. 880 // GARANT: legal information system. - Access mode: <http://www.garant.ru/>.

6. On the safety of packaging [Electronic resource]: Technical regulation of the Customs Union TR CU 005/2011: approved. By the decision of the Commission of the Customs Union of August 16, 2011 No. 769 // GARANT: legal information system. - Access mode: <http://www.garant.ru/>.

7. On the Protection of Consumer Rights: Federal Law of the Russian Federation (as amended on June 2, 1993, January 9, 1996, December 17, 1999, December 30, 2001, August 22, November 2, December 21, 2004 ., July 27, October 16, November 25, 2006, October 25, 2007, July 23, 2008, June 3, November 23, 2009, June 27, July 18, 2011, June 25, July 28, 2012 July 2, December 21, 2013, May 5, 2014, July 13, 2015, July 3, 2016, May 1, 2017, April 18, June 4, July 29, 2019) No. 2300 -1 // GUARANTEE: legal information system. - Access mode: <http://ivo.garant.ru/#/document/10106035/paragraph/115592haps>

8. On the application of sanitary measures in the Customs Union. Unified sanitary and epidemiological and hygienic requirements for goods subject to sanitary and epidemiological surveillance (control). Eurasian Economic

Community. Commission of the Customs Union. Approved by the Decision of the Customs Union Commission dated May 28, 2010 No. 299

9. On technical regulation: federal law No. 184-FZ of December 27, 2002 [Electronic resource]: adopted by the State Duma on December 15, 2002, Approved by the Federation Council on December 18, 2002 // GUARANTEE: legal information system. - Access mode: <http://ivo.garant.ru/#/document/12129354/paragraph/157574:1>

10. On ensuring the uniformity of measurements: Federal Law of the Russian Federation of June 26, 2008 No. 102-ФЗ.

11. On approval of a single list of products subject to mandatory certification and a single list of products, confirmation of which is carried out in the form of a declaration of conformity: Decree of the Government of the Russian Federation of December 1, 2009 No. 982.

12. The basics of the state policy of the Russian Federation in the field of healthy nutrition for the period up to 2020 [Electronic resource]: By the order of the Government of the Russian Federation of October 25, 2010 No. 1873-p: the official text: Meeting of the legislation of the Russian Federation, 2010, N45, Article 5869 // GUARANTEE: legal information system. - Access mode: <http://www.garant.ru/iv/>

13. Food products in terms of their labeling [Electronic resource]: Technical regulation of the Customs Union TR CU 022/2011: approved. By the decision of the Commission of the Customs Union of December 9, 2011 No. 881 // GARANT: legal information system. - Access mode: <http://www.garant.ru/>.

14. The development strategy of the food and processing industry of the Russian Federation for the period until 2020, [Electronic resource]: By order of the Government of the Russian Federation of 04.17.2012 N 559-p: official text: Meeting of the legislation of the Russian Federation, 2012, No. 18, Article 2246 // GUARANTOR: information and legal system. - Access mode: <http://www.garant.ru/iv/>

15. Safety requirements for food additives, flavorings and technological aids

[Electronic resource]: Technical regulation of the Customs Union TR CU 029/2012: approved. By the decision of the Commission of the Customs Union of July 20, 2012 No. 58 // GARANT: legal information system. - Access mode: <http://www.garant.ru/>

16. The strategy of the state policy of the Russian Federation in the field of consumer protection for the period until 2030 [Electronic resource]: approved by the order of the Government of the Russian Federation of August 28, 2017 N

The list of resources of the information and telecommunication network

«Internet»

1. Federal Agency for Technical Regulation and Metrology (Rosstandart) - official website: <https://www.gost.ru/portal/gost/>

2. Agency “Standards and Quality” - official website: <https://ria-stk.ru/>

3. All-Russian Quality Organization - official website: <http://www.mirq.ru/>

4. Primorsky certification center - official website: <http://www.vladcertificate.ru/>

5. The State Regional Center for Standardization, Metrology and Testing in the Primorsky Territory ”(FBU“ Primorsky TSSM ”) - official website: <http://primcsm.ru/>

6. Federal Scientific Center for Food Systems. V.M. Gorbatov Russian Academy of Sciences - official website: <http://www.vniimp.ru/>

List of information technology and software

Using MSOfficePowerPoint Software

8. METHODOLOGICAL INSTRUCTIONS FOR THE DEVELOPMENT OF THE DISCIPLINE

Guidelines for organizing an independent study of the discipline

Abstracts of educational and scientific literature

The review of educational and scientific literature involves an in-depth study of individual scientific works, which should ensure the development of the necessary skills for working on a book. All this will contribute to expanding the scientific horizons, increasing their theoretical training, the formation of scientific competence.

For abstracting, textbooks, individual monographic studies and articles on issues provided for in the curriculum are offered. When selecting literature on the selected issue, it is necessary to cover the most important areas of development of this science at the present stage. Particular attention should be paid to those literary sources that (directly or indirectly) can assist a specialist in his practical activities. However, this section also includes works and individual studies on issues that go beyond the studied discipline. This literature is recommended to be used if you want to expand your knowledge in any branch of science.

Along with the literature on general issues for undergraduates, literature is supposed to be taken into account independently of the profile of their professional activity. Not all of the proposed literature is equivalent in content and volume, so a different approach to its study is possible. In one case, this may be a general review of several literary sources of various authors devoted to the consideration of the same issue, in the other case, a detailed study and review of one of the recommended works or even its individual sections, depending on the degree of complexity of the issue (issue). In order to decide what to do in each case, you should consult with the teacher.

The choice of a specific work for abstracting should be preceded by a detailed familiarization with the list of all literature given in the curriculum of the discipline. It is recommended that you first familiarize yourself with the selected work by looking at the subheadings, selected texts, diagrams, tables, general conclusions. Then it is necessary to carefully and thoughtfully (delving into the ideas and methods of the author) read it, making notes along the way on a separate sheet of paper about the main points and key issues. After reading, you should

consider the content of the article or a separate chapter, paragraph (if it is a monograph) and write it down briefly. Literally, only strict definitions, formulations of laws should be written out. It is sometimes useful to include one or two examples in a record to illustrate. In the event that there are strange places, it is recommended to read the subsequent statement, as it can help to understand the previous material, and then return again to understanding the previous statement.

The result of work on literary sources is an abstract.

In preparing the essay, it is necessary to highlight the most important theoretical points and justify them independently, paying attention not only to the result, but also to the methodology used in studying the problem. Reading non-fiction should be critical. Therefore, we must strive not only to master the main content, but also the method of proof, to reveal the features of different points of view on the same issue, to evaluate the practical and theoretical significance of the results of the abstracted work. A very desirable element of the essay is the expression by the listener of his own attitude to the ideas and conclusions of the author, supported by certain arguments (personal experience, statements of other researchers, etc.).

Abstracts of monographs, journal articles of a research nature must certainly contain a definition of the problem and specific tasks of the study, a description of the methods used by the author, as well as the conclusions reached as a result of the study.

9.MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

This section provides information on the material and technical support of the discipline (indicating the names of devices and equipment, computers, educational and visual aids, audiovisual aids, classrooms, special rooms) necessary for the implementation of the educational process in the discipline.

Name of equipped premises	List of main equipment
Animal Product Technology Laboratory Vladivostok, Russian Island, 10 Ajax, Building 25.1, aud. M 312. The classroom for lectures, practical and	Training furniture for 25 workplaces, teacher's place (table, chair), Analytical and technological equipment (M312): IRF-454 B2 M refractometer; Planix 5

<p>laboratory classes, group and individual consultations, ongoing monitoring and interim certification.</p>	<p>Planimeter; PE-6110 magnetic stirrer with heating; Refrigerator "Ocean-RFD-325B"; Cooker Gorenje E52102 AW (for cooking and heat treatment of food products) 2 pcs.; Libra; Stainless steel distiller steel (5 l / h, power. 4,5 kW); Meat grinder "Unit-ugr-452"; Dishwasher Hansa ZIM416H; Moulinex HM 550 mixer (for grinding products) 101-277950; Blender BRAUN MX-2050; Tripod PE-2710 lab. for burettes.</p> <p>Multimedia equipment: Monoblock Lenovo C360G-i34164G500UDK with Uninterruptible power supply Powercom SKP-1000A; Screen with electric 236 * 147 cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000: 1 EW330U Mitsubishi; Subsystem of specialized hardware mounts CORSA-2007 Tuarex; Video Switching Subsystem: DVI DXP 44 DVI Pro Extron matrix switcher; Extender DVI over twisted pair DVI 201 Tx / Rx; Subsystem of audio switching and sound reinforcement; ceiling mount speaker SI 3CT LP Extron; Sennheiser EW 122 G3 UHF Microphone Lavalier Radio System with a wireless microphone and receiver; DMP 44 LC Extron digital audio processor; Extron IPL T S4 Network Management Controller; Wireless LANs for students are provided with a system based on 802.11a / b / g / n 2x2 MIMO (2SS) access points.</p>
<p>Computer class Vladivostok, Russian Island,. Ajax 10, Building 25.1, aud. M621. The classroom for lectures, practical classes, group and individual consultations, ongoing monitoring and interim certification.</p>	<p>Training furniture for 17 workplaces, teacher's place (table, chair), Monoblock Lenovo C360G-i34164G500UDK 19.5 "Intel Core i3-4160T 4GB DDR3-1600 SODIMM (1x4GB) 500GB Windows Seven Enterprise - 17 pcs; Wired LAN - Cisco 800 series; Wireless LAN for students with a system based on 802.11a / b access points / g / n 2x2 MIMO (2SS).</p>
<p>Reading rooms of the FEFU Scientific Library with open access to the fund (building A - level 10)</p>	<p>Reading room equipment of the FEFU Scientific Library: HP All-in-One 400 All-in-One Monoblock 400 All-in-One 19.5 (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD +/- RW, GigEth, Wi- Fi, BT, usbkbd / mse, Win7Pro (64-bit) + Win8.1Pro (64-bit), 1-1-1 Wty Internet access speed of 500 Mbps. Workplaces for people with disabilities are equipped with braille displays and printers; equipped with: portable devices for reading flat-printed texts, scanning and reading</p>

	machines with a video enlarger with the ability to control color spectra; magnifying electronic magnifiers and ultrasonic markers.
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10. VALUATION FUNDS

Code and wording of competency	Competency Stages	
SPC - 9 - readiness to use the basic principles of the organization of metrological ensuring production	Knows	basic principles of organization of metrological support of production
	Is able	use the basic principles of organization of metrological support of production
	Owns	principles of organization of metrological support of production
SPC - 11-ability to provide technological discipline, sanitary and hygienic working hours of the enterprise, the maintenance of processing equipment in appropriate technical condition	Knows	rules of technological discipline, sanitary and hygienic regime of the enterprise, maintenance of technological equipment in proper technical condition
	Is able	ensure technological discipline, sanitary and hygienic mode of operation of the enterprise, maintenance of technological equipment in proper technical condition
	Owns	the principles of ensuring technological discipline, the sanitary and hygienic regime of the enterprise, the maintenance of technological equipment in proper technical condition
SPC - 12-ability to plan and hold events for providing safety measures on production, on monitoring and environment protection	Knows	norms for planning and carrying out measures to ensure safety at work, to monitor and protect the environment
	Is able	plan and carry out activities to ensure safety at work, to monitor and protect the environment
	Owns	the practice of planning and carrying out measures to ensure safety at work, to monitor and protect the environment
SPC - 15-readiness to provide stability of indicators of production and quality of products	Knows	rules for ensuring the stability of production indicators and the quality of products
	Is able	ensure the stability of production indicators and product quality
	Owns	principles and practice of ensuring the stability of production indicators and the quality of products

I. Evaluation tools for intermediate certification

Interim certification includes the student's answer to the questions for the exam and passing the final test.

Student Examination Criteria

Points required to evaluate the	Creditscore	Requirements for completed competencies in the student's oral response
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final test		
85-100	Excellent	Grade «Excellent» exhibited to a student who has strong knowledge of quality management systems and bio-product safety. He knows the methods of processing current production information, performing analysis of the obtained data for use in product quality management
75-85	"good"	Grade "good" is given to a student who knows a significant part of the program material, does not make significant mistakes, but hesitantly performs practical work
61-75	"satisfactorily"	The grade is "satisfactory" is given to a student who knows a significant part of the program material, but makes significant mistakes, uncertainly with great difficulties performs practical work
60-0	“unsatisfactory”	The grade “unsatisfactory” is given to a student who does not know a significant part of the program material, makes significant mistakes, hesitantly performs practical work with great difficulties and cannot continue his studies without additional classes in the relevant discipline.

Students' independent work consists of preparing for practical classes, working on recommended literature, writing reports on the topic of a seminar, and preparing presentations.

The teacher offers each student individual and differentiated tasks. Some of them can be carried out in a group (for example, several students can do the preparation of a report and presentation on the same topic, sharing their responsibilities - one prepares the scientific and theoretical part, and the second carries out an analysis of the practice).

Tasks for self-fulfillment

1. On a given topic of the simulation game, analysis of the discipline under study should be carried out. Based on the developed material, an imitation game should be prepared and presented for discussion.
2. Writing an essay on a topic proposed by the teacher or independently selected by the student and agreed with the teacher.
3. Preparation of presentations using multimedia equipment.

Methodological instructions for the implementation of the essay

The goals and objectives of the essay

The essay(from lat. Referto - report, report) is a summary of the problems of a practical or theoretical nature with the formulation of certain conclusions on the

subject. A student-selected problem is studied and analyzed based on one or more sources. In contrast to the term paper, which is a comprehensive study of the problem, the essay is aimed at analyzing one or more scientific papers.

The objectives of writing an essay are:

development of students' skills in finding relevant problems of modern legislation;

- development of skills to summarize the material with highlighting only the most significant points necessary to reveal the essence of the problem;

- development of skills to analyze the material studied and formulate their own conclusions on the selected issue in writing, in a scientific, competent language.

The tasks of writing an essay are:

- teach the student to convey the opinions of the authors as faithfully as possible, on the basis of which the student writes his essay;

- teach the student to correctly state their position on the problem analyzed in the abstract;

- prepare the student for further participation in scientific - practical conferences, seminars and competitions;

- help the student to determine the topic of interest to him, the further disclosure of which is possible when writing a term paper or diploma;

- to clarify for themselves and state the reasons for their consent (disagreement) with the opinion of one or another author on this issue.

The basic requirements for the content of the essay, course project

The student should use only those materials (scientific articles, monographs, manuals) that are directly related to their chosen topic. Remote reasoning not related to the problem being analyzed is not allowed. The content of the essay should be specific, only one problem should be investigated (several are allowed, only if they are interconnected). The student must strictly adhere to the logic of presentation (start with the definition and analysis of concepts, go to the problem

statement, analyze the ways to solve it and draw the appropriate conclusions). The essay should end with a conclusion on the topic.

The structure of the abstract consists of:

1. The title page;
2. Introduction, where the student formulates the problem to be analyzed and investigated;
3. The main text, which consistently reveals the selected topic. Unlike term paper, the main text of the essay involves a division into 2-3 paragraphs without highlighting the chapters. If necessary, the text of the abstract can be supplemented by illustrations, tables, graphs, but they should not "overload" the text;
4. Conclusions, where the student formulates conclusions made on the basis of the main text.
5. The list of used literature. This list refers to those sources that the student refers to in preparing the essay, as well as others that were studied by him during the preparation of the essay.

The essay is 10-15 pages of typewritten text, but in any case should not exceed 15 pages. Interval - 1.5, font size - 14, margins: left - 3 cm, right - 1.5 cm, upper and lower - 1.5 cm. Pages must be numbered. The indent from the beginning of the line is 1.25 cm.

The order of delivery of the essay and its assessment

Essays are written by students during the semester in the terms set by the teacher in a particular discipline, reported by the student and submitted for discussion. The printed version is given to the teacher, leading the discipline.

Based on the results of the check, the student is given a certain number of points, which is included in the total number of student points scored by him during the semester. When evaluating the essay, the correspondence of the content to the chosen topic, the clarity of the work structure, the ability to work with scientific literature, the ability to pose a problem and analyze it, the ability to think logically, knowledge of professional terminology, and literacy are taken into account.

Recommended topics and list of abstracts and reports

1. The Federal Law of the Russian Federation “On Technical Regulation”.
2. The law of the Russian Federation "On the protection of consumer rights."
3. The Federal Law of the Russian Federation “On Safety and Quality of Food Products”.
4. Legislation in the field of ensuring the quality and safety of products.
5. Legislation in the field of sanitary and epidemiological welfare of the population.
6. Legislation in the field of technical regulation.
7. National regulations in the field of production and turnover of food products.
8. International regulatory documents in the field of production and turnover of food products.
9. Standards Codex Alimentarius.
10. EU Directives.
11. A single food standard.
12. ISO 22000 - “Food Safety Management Standards”
13. HACCP system
14. Laws of a sectoral nature, application, control.
15. Control and supervision of compliance with legislation in the food industry.
16. Basic concepts in the field of standardization.
17. The goals and objectives of standardization.
18. Types of regulatory documents established by the Federal Law "On Technical Regulation".
19. A brief description of the history of the development of standardization.
20. Development of standardization in the Russian Federation.
21. The history of the development of an international organization for standardization.

22. The basic principles of standardization. Standardization Functions. Standardization methods.

23. What is the method of ordering standardization objects.

24. Optimization of standardization parameters

25. General procedure for the development of regulatory documents

26. Application of standards. Application of international standards

27. Spheres of distribution of the Federal Law “On Technical Regulation”.

28. List the principles of technical regulation.

29. What are the minimum necessary requirements, taking into account the degree of risk of harm, establish technical regulations.

30. List the goals and principles of standardization established in the Law "On Technical Regulation".

31. What regulatory documents are defined by the Law as valid in the territory of the Russian Federation.

32. Who and how exercises state control and supervision of the requirements of technical regulations.

33. Existing standardization systems in the Russian Federation.

34. The system of standards for technical preparation of production.

35. Standards ensuring the quality of products at the operational stage.

36. All-Russian classifiers of technical and economic information.

37. List the main organizations for standardization.

38. Areas of activity of ISO and the main objects of standardization.

Questions for credit

1. The Federal Law of the Russian Federation “On Technical Regulation”.

2. The law of the Russian Federation "On the protection of consumer rights."

3. The Federal Law of the Russian Federation “On Safety and Quality of Food Products”.

4. Legislation in the field of ensuring the quality and safety of products.

5. Legislation in the field of sanitary and epidemiological welfare of the population.

6. Legislation in the field of technical regulation.
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37. List the main organizations for standardization.
38. Areas of activity of ISO and the main objects of standardization.

II. Evaluation tools for ongoing certification

Evaluation Criteria

- 100-86 points are awarded to the student if the student expressed his opinion on the formulated problem, argued for it, accurately determining its content and components. The data of domestic and foreign literature, statistical information, and regulatory information are presented. The student knows and possesses the skill of independent research work on the topic of research; methods and techniques of analysis of theoretical and / or practical aspects of the study area. There are no factual errors related to understanding the problem; graphically, the work is framed correctly

- 85-76 - points - the work is characterized by semantic integrity, coherence and sequence of presentation; no more than 1 mistake was made in explaining the meaning or content of the problem. For argumentation, data from domestic and

foreign authors are given. Demonstrated research skills. There are no actual errors related to understanding the problem. One or two errors in the design of the work

- 75-61 points - the student conducts a fairly independent analysis of the main stages and semantic components of the problem; understands the basic foundations and theoretical justification of the chosen topic. The main sources on this topic were brought. No more than 2 errors were made in the meaning or content of the problem, the design of the work

- 60-50 points - if the work is a retransmitted or completely rewritten source text without any comments, analysis. The structure and theoretical component of the topic is not disclosed. Three or more than three errors were made in the semantic content of the problem being revealed and in the design of the work.

Questions for colloquiums, interviews on the subject

"The international legal framework for ensuring the safety and quality of agricultural raw materials and food products"

1. International, regional and other standardization organizations.
2. Interstate cooperation in the field of standardization.
3. Russia and the WTO requirement in the field of standardization (Agreement on technical barriers to trade).
4. Tasks of international cooperation in the field of standardization.
5. Application of international standards.
6. Application of interstate standards.
7. The history of the formation of standardization.
8. European Union standardization activities.
9. Activities of ROSSTANDARD in the field of standardization.
10. Activities of the Customs Union in the field of standardization.
11. What is technical legislation?
12. Name the objects of technical regulation.
13. What are the principles of technical regulation.
14. What are the types of technical regulations.

15. What is standardization as an activity?
16. What are the goals of standardization.
17. What is the result of standardization activities?
18. What are the international standardization organizations.
19. What are the legal framework for standardization.

TESTS

VARIANT №1

Task 1. The production control system, quality management and regulatory and technical documentation of food products are carried out:

- a) production manager;
- b) factory lab workers;
- c) shop employees;
- d) warehouse manager.

Task 2. A set of regulatory documentation for each type of manufactured products includes:

- a) GOST;
- b) the formulation;
- c) technical conditions and technological instructions;
- d) GOST (GOST R, OST or TU), recipe, technological instruction.

Task 3. Standards of enterprises are approved:

- a) certification bodies;
- b) Gosstandart;
- c) by the enterprise itself;
- d) experts.

Task 4. A differential method for assessing product quality is:

- a) a method of assessing product quality based on the use of individual quality indicators;
- b) a method for assessing product quality based on the use of integrated quality indicators;
- c) the method involves the simultaneous use of single and complex quality indicators;
- d) a method in which the values of indicators of product quality are determined using the rules of mathematical statistics.

Task 5. Measuring methods for determining quality indicators are:

- a) methods for determining indicators of product quality, carried out on the basis of observation and counting the number of certain events, items or costs;
- b) the methods reflect the use of theoretical or empirical dependencies of product quality indicators on its parameters;
- c) a method based on the collection and analysis of actual and potential consumers;
- d) the method is based on information obtained using measuring and control instruments.

Task 6. Physical methods for determining quality indicators are used:

- a) to determine the composition and quantity of substances included in the products;
- b) to determine the physical properties of products;
- c) to determine the nutritional and biological value of products;
- d) to determine the degree of affection of products with various microorganisms.

Task 7. A single indicator of quality is:

- a) an indicator of product quality characterizing one of its properties;
- b) an indicator of product quality that characterizes several properties of the product or one complex property;
- c) an indicator estimated by a five-point system;
- d) the indicator is defined as the ratio of the total beneficial effect of consumption to the total cost of its creation, operation or consumption.

Task 8. Assessment of the quality of raw materials and semi-finished products arriving at the enterprise, the service is engaged:

- a) exit control;
- b) incoming control;
- c) operational control;
- d) acceptance control.

Task 9. The group of measuring methods for determining quality indicators does not include:

- a) chemical method;
- b) physiological method;
- c) biological method;
- d) calculation method.

Task 10. To determine the energy value of the product is used:

- a) registration method;
- b) calculation method;
- c) measuring method;
- d) organoleptic method.

VARIANT № 2

Task 1. The production control system, quality management and regulatory and technical documentation of food products are:

- a) control of technological processes of production;
- b) control of conformity of the output to certificates of conformity;
- c) continuous and properly organized control of raw materials, production and finished products;
- d) quality control of raw materials.

Task 2. The analyzed sample is:

- a) a small amount of product selected from one place at a time at a certain point or time;
- b) the totality of all samples taken from the party;
- c) a sample isolated from the combined sample and used to determine the quality indicators of the entire batch;
- d) the sample is allocated from the average and used for further arbitration analyzes.

Task 3. The services of technological control does not apply:

- a) incoming control service;
- b) exit control service;
- c) operational control service;
- d) acceptance control service.

Task 4. The set of organoleptic properties of the products relates to:

- a) comprehensive quality indicators;
- b) determining quality indicators;
- c) integral indicators of quality; -
- d) single quality indicators.

Task 5. To assess the quality of food products used:

- a) the desire of consumers;
- b) an indication of the head;
- c) quality indicators;
- d) instructions of experts.

Task 6. Registration methods are:

- a) methods based on information obtained using measuring and control instruments;
- b) methods for determining indicators of product quality, carried out on the basis of observation and counting the number of certain events, items and costs;
- c) methods reflecting the use of theoretical and empirical dependencies of product quality indicators on its parameters;
- d) methods for determining the quality of products based on a decision made by experts.

Task 7. Organoleptic methods are:

- a) methods based on information obtained using measuring and control instruments;
- b) methods for determining indicators of product quality, carried out on the basis of observation and counting the number of certain events, items and costs;
- c) methods based on the analysis of the senses;
- d) methods for determining the quality of products based on a decision made by experts.

Task 8. The appearance of the product is:

- a) sensation arising from the stimulation of olfactory receptors;

b) a characteristic of the state of aggregation, which has mechanical properties;

c) sensation arising from the excitation of taste buds;

d) the general visual impression that the product makes.

Task 9. Reliability index characterizes:

Answers:

a) the property of the object to keep in time within the established limits of the values of all parameters characterizing the ability to perform the required functions;

b) the property of the product, which determine the main functions for which it is intended and determines the scope of its application;

c) the property of the composition and structure of products that determine its adaptability to achieve minimum costs in production;

d) the interaction of the "man-product" system.

Task 10. Taste is:

a) sensation arising from the stimulation of olfactory receptors;

b) a characteristic of the state of aggregation, which has mechanical properties;

c) sensation arising from the excitation of taste buds;

d) the general visual impression that the product makes.

VARIANT № 3

Task 1. Assessment of the quality of the process involved in the service:

a) exit control;

b) incoming control;

c) operational control;

d) acceptance control.

Task 2. Products prepared in strict accordance with the recipe and technology, not having organoleptic indicators of deviations from the established requirements are evaluated:

a) satisfactory;

- b) unsatisfactory;
- c) good;
- d) excellent.

Task 3. Biochemical research method relates to:

- a) registration methods;
- b) measuring methods;
- c) calculation methods;
- d) organoleptic methods.

Task 4. A comprehensive quality indicator is:

- a) an indicator of product quality characterizing one of its properties;
- b) an indicator of product quality that characterizes several properties of the product or one complex property;
- c) an indicator estimated by a five-point system;
- d) the indicator is defined as the ratio of the total beneficial effect of consumption to the total cost of its creation, operation or consumption.

Task 5. Calculation methods for determining quality indicators are:

- a) methods for determining indicators of product quality, carried out on the basis of observation and counting the number of certain events, items, or costs;
- b) the methods reflect the use of theoretical or empirical dependencies of product quality indicators on its parameters;
- c) a method based on the collection and analysis of actual and potential consumers;
- d) the method is based on information obtained using measuring and control instruments.

Task 6. A sample for the analysis of large-sized, portioned and small-sized semi-finished meat products is composed by opening:

- a) 20% of the total number of transport packages;
- b) 40% of the total number of transport packages;
- c) 70% of the total number of transport packages;

d) 10% of the total number of transport packages.

Task 7. The smell of meat broth is determined in the process of heating to (° C):

- a) 80 ... 85;
- b) 50 ... 60;
- c) 90 ... 95;
- d) 100 ... 120

Task 8. The moisture content of the meat product is determined in the context by:

- a) feelings;
- b) applying filter paper to the surface;
- c) pressing with a finger until a pit is formed and its subsequent restoration;
- d) by the amount of meat juice released during a certain period of time.

Task 9. In ground beef, the permissible fat content is

- a) 33;
- b) 17;
- c) 50;
- d) 80.

Task 10. The temperature in the thickness of the chilled minced meat is (° C);

- a) not higher than 4;
- b) not higher than 0;
- c) not higher than 10;
- d) not higher than -8.

VARIANT №4

Task 1. Assessment of the quality of finished products is the service:

- a) exit control;
- b) incoming control;
- c) operational control;
- d) acceptance control.

Task 2. The smell is:

- a) sensation arising from the stimulation of olfactory receptors;
- b) a characteristic of the state of aggregation, which has mechanical properties;
- c) sensation arising from the excitation of taste buds;
- d) the general visual impression that the product makes.

Task 3. Expert methods are:

- a) methods based on information obtained using measuring and control instruments;
- b) methods for determining indicators of product quality, carried out on the basis of observation and counting the number of certain events, items and costs;
- c) methods reflecting the use of theoretical and empirical dependencies of product quality indicators on its parameters;
- d) methods for determining the quality of products based on a decision made by experts.

Task 4. Products prepared in compliance with the recipe, but having minor or easily removable deviations from the established requirements are evaluated:

- a) satisfactory;
- b) unsatisfactory;
- c) good;
- d) excellent.

Task 5. Chemical methods for determining quality indicators are used:

- a) to determine the composition and quantity of substances included in the products;
- b) to determine the physical properties of products;
- c) to determine the nutritional and biological value of products;
- d) to determine the degree of affection of products with various microorganisms.

Task 6. The defining indicator of quality is:

- a) an indicator of product quality characterizing one of its properties;
- b) an indicator of product quality that characterizes several properties of the product or one complex property;
- c) an indicator estimated by a five-point system;
- d) the indicator is defined as the ratio of the total beneficial effect of consumption to the total cost of its creation, operation or consumption.

Task 7. The raw materials used for the preparation of products must comply with:

- a) the requirements of approved formulations;
- b) the requirements of regulatory documents, certificates of conformity, veterinary certificates;
- c) requirements for chemical composition;
- d) the requirements of the security certificate.

Task 8. The indicator of manufacturability characterizes:

- a) the property of the object to keep in time within the established limits of the values of all parameters characterizing the ability to perform the required functions;
- b) the property of the product, which determine the main functions for which it is intended and determines the scope of its application;
- c) the property of the composition and structure of products that determine its adaptability to achieve minimum costs in production;
- d) the interaction of the "man-product" system.

Task 9. The stickiness of the meat product is determined in the context by:

- a) feelings;
- b) applying filter paper to the surface;
- c) pressing with a finger until a pit is formed and its subsequent restoration;
- d) by the amount of meat juice released during a certain period of time.

Task 10. The temperature in the thickness of the frozen minced meat is (°C);

- a) not higher than 4;
- b) not higher than 0;
- c) not higher than 10;
- d) not higher than -8.

VARIANT № 5

Task 1. The consistency of the meat is determined by:

- a) feelings;
- b) applying filter paper to the surface;
- c) pressing with a finger until a pit is formed and its subsequent restoration;
- d) by the amount of meat juice released during a certain period of time.

Task 2. The pH of fresh meat is within:

- a) 4-4.5;
- b) 5-5.8;
- c) 6-6.5;
- d) 7-7.5.

Task 3. The integral indicator of quality is:

- a) an indicator of product quality characterizing one of its properties;
- b) an indicator of product quality that characterizes several properties of the product or one complex property;
- c) an indicator estimated by a five-point system;
- d) the indicator is defined as the ratio of the total beneficial effect of consumption to the total cost of its creation, operation or consumption.

Task 4. Consistency is:

- a) sensation arising from the stimulation of olfactory receptors;
- b) a characteristic of the state of aggregation, which has mechanical properties;
- c) sensation arising from the excitation of taste buds;
- d) the general visual impression that the product makes.

Task 5. Dishes having significant deviations from the requirements of the technology, but suitable for sale without processing or after completion, are evaluated:

Answers:

- a) satisfactory;
- b) unsatisfactory;
- c) good;
- d) excellent.

Task 6. Sociological methods are:

- a) methods based on information obtained using measuring and control instruments;
- b) methods for determining indicators of product quality, carried out on the basis of observation and counting the number of certain events, items and costs;
- c) methods reflecting the use of theoretical and empirical dependencies of product quality indicators on its parameters;
- d) a method for determining product quality, based on the collection and analysis of actual and potential consumers.

Task 7. General test is:

- a) a small amount of products selected from one place at a time at a certain point or time;
- b) the totality of all samples taken from the party;
- c) a sample isolated from the combined sample and used to determine the quality indicators of the entire batch;
- d) the sample is allocated from the average and used for further arbitration analyzes.

Task 8. In the organoleptic analysis of food products, the first indicators to be studied are:

- a) appearance, color;
- b) smell, consistency;
- c) taste;

d) smell and taste.

Task 9. Ergonomic indicator characterizes:

a) the property of the object to keep in time within the established limits of the values of all parameters characterizing the ability to perform the required functions;

b) the property of the product, which determine the main functions for which it is intended and determines the scope of its application;

c) the property of the composition and structure of products that determine its adaptability to achieve minimum costs in production;

d) the interaction of the "man-product" system.

Task 10. Physico-chemical quality indicators of wet semi-finished products and culinary products are stored in the refrigerator for no more than a day at a temperature (° C):

a) 0 ... 2;

b) -8 ... 3;

c) 4 ... 8;

d) 10 ... 15.

VARIANT №6

Task 1. State standards are approved:

a) certification bodies;

b) Gosstandart;

c) by the enterprise itself;

d) experts.

Task 2. Industry standards are developed:

a) for products, works and services, the needs of which are intersectoral in nature;

b) in order to promote mutual understanding, technical unity and interconnection of various fields of science, technology and production;

c) in relation to the products of a particular industry;

d) an enterprise or other business entities in the case when it is not practical to create a standard.

Task 3. The quality of food is:

a) the set of properties of products that determine its suitability to satisfy the physiological needs of a person in food substances and energy, taking into account the principles of good nutrition;

b) an objective feature of the product, which may manifest during its creation, operation or consumption;

c) the quantitative characteristic of one or more properties of the products that make up its quality;

d) the parameter of the product, which characterizes its quantity.

Task 4. The economic indicator characterizes:

a) the property of the object to keep in time within the established limits of the values of all parameters characterizing the ability to perform the required functions;

b) the property of the product, which determine the main functions for which it is intended and determines the scope of its application;

c) the property of the composition and structure of products that determine its adaptability to achieve minimum costs in production;

d) the costs of the development, manufacture, storage and sale of products.

Task 5. The consistency of the meat product is determined in the context by:

a) feelings;

b) applying filter paper to the surface;

c) pressing with a finger until a pit is formed and its subsequent restoration;

d) by the amount of meat juice released during a certain period of time.

Task 6. The structure of the incoming quality control service at enterprises with their own storage facilities includes:

a) warehouse manager, deputy director for procurement and merchandiser; foreman;

- c) shop manager, production manager, process engineer, foreman, foreman;
- d) the head. warehouse, team leader.

Task 7. The composition of the marriage committee includes:

- a) from 13 to 15 people;
- b) from 5 to 11 people;
- c) from 1 to 3 people;
- d) from 3 to 5 people.

Task 8. In the organoleptic analysis of food products, the first indicators to be studied are:

- a) appearance, color;
- b) smell, consistency;
- c) taste;
- d) smell and taste.

Task 9. In the organoleptic analysis of food products, the latter are studied indicators:

- a) appearance, color;
- b) smell, consistency;
- c) taste and some features of consistency;
- d) smell and taste.

Task 10. The mass of the finished meat or fish semi-finished product is measured in:

- a) g;
- b) degrees;
- c) ml
- d) m.

VARIANT № 7

Task 1. Products with significant defects, but not excluding the possibility of their processing are evaluated:

- a) satisfactory;

- b) unsatisfactory;
- c) good;
- d) excellent.

Task 2. The composition of the operational quality control service at enterprises includes:

- a) warehouse manager, deputy director for procurement and merchandiser;
- b) the shop manager, production manager, process engineer, foreman;
- c) shop manager, production manager, process engineer, chef, foreman;
- d) the head. warehouse, foreman.

Task 3. In organoleptic analysis of food products, the first indicators to be studied are:

- a) appearance, color;
- b) smell, consistency;
- c) taste;
- d) smell and taste.

Task 4. Under the property of food products is understood:

- a) the set of properties of products that determine its suitability to satisfy the physiological needs of a person in food substances and energy, taking into account the principles of good nutrition;
- b) an objective feature of the product, which may occur during its creation, operation or consumption;
- c) the quantitative characteristic of one or more properties of the products that make up its quality;
- d) product parameters characterizing its quantity.

Task 5. Patent law indicator characterizes:

- a) the possibility of unhindered sales of products not only domestically, but abroad;
- b) the property of the product, which determine the main functions for which it is intended and determines the scope of its application;

c) the property of the composition and structure of products that determine its adaptability to achieve minimum costs in production;

d) the costs of the development, manufacture, storage and sale of products.

Task 6. The fundamental standards are developed:

a) for products, works and services, the needs of which are intersectoral in nature;

b) in order to promote mutual understanding, technical unity and interconnection of various fields of science, technology and production;

c) in relation to the products of a particular industry;

d) an enterprise or other business entities in the case when it is not practical to create a standard.

Task 7. When determining the consistency, the temperature of the thawed fish fillet should be (° C):

Answers:

a) -2 ... 0;

b) 0 ... 5;

c) 5 ... 10;

d) 10 ... 15.

Task 8. Biological methods for determining quality indicators are used:

a) to determine the composition and quantity of substances included in the products;

b) to determine the physical properties of products;

c) to determine the nutritional and biological value of products;

d) to determine the degree of affection of products with various microorganisms.

Task 9. For physico-chemical analyzes, brittle and crumbly semi-finished products are crushed by:

a) grinding in a mortar or in a laboratory mill;

b) passing through a meat grinder;

c) homogenization in a tissue shredder;

d) double passing through a meat grinder.

Task 10. Assessment of the quality of the process involved in the service:

- a) exit control;
- b) incoming control;
- c) operational control;
- d) acceptance control.

VARIANT № 8

Task 1. State standards are developed:

- a) for products, works and services, the needs of which are intersectoral in nature;
- b) in order to promote mutual understanding, technical unity and interconnection of various fields of science, technology and production;
- c) in relation to the products of a particular industry;
- d) an enterprise or other business entities in the case when it is not practical to create a standard.

Task 2. The structure of the incoming quality control service at enterprises without their own storage facilities includes:

- a) warehouse manager, deputy director for procurement and merchandiser;
- b) the shop manager, production manager, process engineer, foreman;
- c) the shop manager, production manager, process engineer, chef, foreman;
- d) the head. warehouse, the chef.

Task 3. The smell is:

- a) sensation arising from the stimulation of olfactory receptors;
- b) a characteristic of the state of aggregation, which has mechanical properties;
- c) sensation arising from the excitation of taste buds;
- d) the general visual impression that the product makes.

Task 4. The correctness of the completeness of the investment of raw materials according to the recipe is checked by:

- a) microbiological indicators;

- b) organoleptic indicators;
- c) nutritional value;
- d) physical and chemical indicators.

Task 5. Butter in ultraviolet light gives:

- a) a whitish pink glow;
- b) a bright yellow glow;
- c) intensely blue glow;
- d) intensely purple glow.

Task 6. The differential method of assessing product quality is:

- a) a method of assessing product quality based on the use of individual quality indicators;
- b) a method for assessing product quality based on the use of integrated quality indicators;
- c) the method involves the simultaneous use of single and complex quality indicators;
- d) a method in which the values of indicators of product quality are determined using the rules of mathematical statistics.

Task 7. The crushed muscle of the meat in the ultraviolet glow:

- a) in gray;
- b) white color;
- c) yellow;
- d) in blue.

Task 8. Counterfeit foods are:

- a) food products having poor organoleptic quality indicators;
- b) products with poor microbiological quality indicators;
- c) products containing harmful substances in excess of the MPC;
- d) products deliberately modified or having hidden properties and qualities, information about which is knowingly incomplete or false.

Task 9. Physico-chemical research method relates to:

- a) registration methods;

- b) measuring methods;
- c) calculation methods;
- d) organoleptic methods.

Task 10. The luminescent method for determining offal in culinary products based on:

- a) on the interaction of Lugol's solution with starch of offal filler;
- b) various ultraviolet luminescence of offal;
- c) discoloration of indicator paper in the presence of offal;
- d) a change in the pH of the system.

VARIANT № 9

Task 1. Technical conditions are developed:

- a) for products, works and services, the needs of which are intersectoral in nature;
- b) in order to promote mutual understanding, technical unity and interconnection of various fields of science, technology and production;
- c) in relation to the products of a particular industry;
- d) an enterprise or other business entities in the case when it is not practical to create a standard.

Task 2. The appearance of the product is:

- a) sensation arising from the stimulation of olfactory receptors;
- b) a characteristic of the state of aggregation, which has mechanical properties;
- c) sensation arising from the excitation of taste buds;
- d) the general visual impression that the product makes.

Task 3. Under the quality indicator of catering products is understood:

- a) the set of properties of products that determine its suitability to satisfy the physiological needs of a person in food substances and energy, taking into account the principles of good nutrition;
- b) an objective feature of the product, which may occur during its creation, operation or consumption;

c) the quantitative characteristic of one or more properties of the products that make up its quality;

g) the parameter of the product, which characterizes its quantity.

Task 4. In the process of marriage in determining the mass of piece goods are weighed simultaneously by:

a) 5 pieces;

b) 10 pieces;

c) 20 pieces;

d) 50 pieces.

Task 5. Products with extraneous taste unusual to them, salted, sharply acidic, i.e. with obvious signs of damage are assessed:

a) Oh good;

b) satisfactory;

c) unsatisfactory;

d) 1 point.

Task 6. Ergonomic indicator characterizes:

a) the property of the object to keep in time within the established limits of the values of all parameters characterizing the ability to perform the required functions;

b) the property of the product, which determine the main functions for which it is intended and determines the scope of its application;

c) the property of the composition and structure of products that determine its adaptability to achieve minimum costs in production;

d) the interaction of the "man-product" system.

Task 7. The service evaluates the quality of finished products:

a) exit control;

b) incoming control;

c) operational control;

d) acceptance control.

Task 8. During organoleptic analysis in food products, the following parameters are studied last:

- a) appearance, color;
- b) smell, consistency;
- c) taste and some features of consistency;
- d) smell and taste.

Task 9. The structure of the acceptance quality control service at enterprises includes:

- a) warehouse manager, deputy director for procurement and merchandiser;
- b) production manager, process engineer, foreman;
- c) shop manager, production manager, process engineer, chef, foreman;
- d) the head. warehouse, foreman.

Task 10. Tendons or cartilage in the UV light:

- a) in gray;
- b) white color;
- c) yellow;
- d) in blue.

VARIANT № 10

Task 1. Under the quantitative characteristic of food products is understood:

- a) the set of properties of products that determine its suitability to satisfy the physiological needs of a person in food substances and energy, taking into account the principles of good nutrition;
- b) an objective feature of the product, which may occur during its creation, operation or consumption;
- c) the quantitative characteristic of one or more properties of the products that make up its quality;
- d) the parameter of the product, which characterizes its quantity.

Task 2. Margarine in the ultraviolet gives:

- a) a whitish pink glow;

- b) a bright yellow glow;
- c) intensely blue glow;
- d) intensely purple glow.

Task 3. Assessment of the quality of incoming raw materials to the enterprise is engaged in the service:

- a) exit control;
- b) incoming control;
- c) operational control;
- d) acceptance control.

Task 4. In the process of marriage in determining the mass of piece goods are weighed simultaneously by:

- a) 5 pieces;
- b) 10 pieces;
- c) 20 pieces;
- d) 50 pieces.

Task 5. For physico-chemical analyzes, pasty and easily kneading products are crushed by:

- a) grinding in a mortar or in a laboratory mill;
- b) grinding in a mortar or passing through a meat grinder;
- c) homogenization in a tissue shredder;
- d) double passing through a meat grinder.

Task 6. The consistency of the meat is determined by:

- a) feelings;
- b) applying filter paper to the surface;
- c) pressing with a finger until a pit is formed and its subsequent restoration;
- d) by the amount of meat juice released during a certain period of time.

Task 7. A single indicator of quality is:

- a) an indicator of product quality characterizing one of its properties;
- b) an indicator of product quality that characterizes several properties of the product or one complex property;

- c) an indicator estimated by a five-point system;
- d) the indicator is defined as the ratio of the total beneficial effect of consumption to the total cost of its creation, operation or consumption.

Task 8. Microbiological methods for determining quality indicators are used:

- a) to determine the composition and quantity of substances included in the products;
- b) to determine the physical properties of products;
- c) to determine the nutritional and biological value of products;
- d) to determine the degree of affection of products with various microorganisms.

Task 9. The fat content for minced pork is (%):

- a) 17;
- b) 33;
- c) 50;
- d) 70.

Task 10. Determination of the content of extractives in drinks is carried out using the device:

- a) refractometer;
- b) spectrophotometer;
- c) Zhuravlev;
- d) pH meter.

Keys to Test Residual Knowledge Testing

Task number	Variant Number									
	1	2	3	4	5	6	7	8	9	10
1	B	C	C	D	C	B	B	A	D	D
2	D	C	D	A	C	C	C	B	D	A
3	C	A	B	D	D	A	D	A	C	B
4	A	C	B	C	B	D	B	D	B	C
5	D	C	B	A	A	C	A	B	D	B
6	B	B	D	C	D	A	B	C	D	C
7	C	C	A	B	B	B	C	A	D	A
8	D	D	B	C	A	C	C	D	C	D
9	A	A	B	A	D	C	C	B	B	C
10	C	C	A	D	C	A	C	B	D	A

Knowledge Control Test Questions:

1. The objectives of standardization:

- A) the establishment of mandatory norms and requirements;
- B) the establishment of recommendatory norms and requirements;
- C) the removal of technical barriers in international trade;
- D) the establishment of technical regulations;
- E) establishing guidelines with international standardization.

2. The normative document obligatory for implementation is:

- A) national (state) standard;
- B) technical regulations;
- C) the standard of the enterprise;
- D) industry standard;
- E) standards of scientific and technical associations.

3. International standards may apply in the Russian Federation:

- A) after the introduction of the requirements of the international standard GOST R;

- B) before adoption as GOST R;
 - C) if there are references to other standards;
 - D) if the state standard is not adopted;
 - E) if the requirements of the international standard comply with state standards;
4. The organization and principles of standardization in the Russian Federation are defined:
- A) the law "On Protection of Consumer Rights";
 - B) the law "On Standardization";
 - C) Decree of the Government of the Russian Federation;
 - D) orders of the FATRiM of the Russian Federation;
 - E) by-laws of the Government of the Russian Federation.
5. The state control at the enterprise controls:
- A) compliance with state standards;
 - B) compliance with mandatory requirements of state standards;
 - C) compliance with certification marks of certification systems for countries;
 - D) compliance with certification requirements
 - E) compliance with the requirements of the license.
6. National Information Center AND SONNET in Russia:
- A) standard of the Russian Federation;
 - B) VNIKI;
 - C) publishing of standards;
 - D) the bulletin "Gosstandart warns";
 - E) ESKD product classifier.
7. Priority tasks related to improving standards in the Russian Federation include:
(name the wrong answer)
- A) the development of export of goods;
 - B) waste disposal;
 - C) labor protection;
 - D) product quality control;
 - E) the safety of defense products.

8. International standards of ISO 9000 series in Russia are of the nature:

- A) obligatory;
- B) voluntary;
- C) selective;
- D) advisory;
- E) prudent.

9. By adopting GOST R, ISO 9000 series standards have been introduced in Russia:

- A) ISO 9001;
- B) ISO 9002;
- C) ISO 9003;
- D) ISO 9004.

10. The “family” of ISO 9000 series standards is growing due to:

- A) expanding the objects of standardization and increasing areas of application;
- B) an increase in the number of users;
- C) requirements for quality systems;
- D) process control;
- E) evaluation of the operational characteristics of the products.

11. The following are recognized as objects of standardization of services in the Russian Federation:

- A) quality indicators (characteristics of services);
- B) the range of services;
- C) terminology;
- D) systems for ensuring the quality of services;
- E) the effectiveness of the quality of services.

12. Standardization in the field of ecology is carried out at the level of:

- A) national;
- B) internationally;
- C) national, taking into account the requirements of international standards;
- D) the international community of the EU;

E) local government.

13. Mandatory certification in the Russian Federation is introduced by law:

A) “On certification”;

B) “On the protection of consumer rights”;

C) “On the sanitary-epidemiological well-being of the population”;

D) “On certification of products and services”

E) “On standardization”.

14. For goods subject to mandatory certification, the responsibility for the availability of the certificate and the mark of conformity bears:

A) a trade organization;

B) the manufacturer of the goods;

C) test center;

D) FATRiM RF;

E) production control.

15. Certification of the quality assurance system in the Russian Federation:

A) obligatory;

B) voluntary;

C) target;

D) limited;

E) selective.

16. The system of units of physical quantities is:

A) the set of units used in practice;

B) a set of basic and production units;

C) a set of basic units;

D) the set of production units;

E) metric system.

17. The standard sample is:

A) an unambiguous measure;

B) a multi-valued measure;

C) store measures;

D) a variable measure;

E) a set of measures.

18. General management of the State Metrological Service provides:

A) Chamber of Commerce;

B) the Ministry of trade of the Russian Federation;

C) FATRiMRF;

D) Gosenergonadzor;

E) The Government of the Russian Federation.

19. Standardization in the field of environmental protection is carried out on the basis of:

A) national environmental legislation;

B) the requirements of the movement of "green";

C) at the initiative of consumer protection societies;

D) risk analysis for environmental management;

E) the identification of critical points in the environment, taking into account consumer safety.

20. Identical standards are fully consistent in:

A) form;

B) the content;

C) the form and content;

D) application;

E) all of the above.

21. Most Russian testing laboratories are accredited to:

A) technical competence;

B) independence;

C) technical competence and independence;

D) methods of inspection, survey;

E) quality systems.

22. The conditions for applying the conformity mark in certification systems are determined by:

- A) FATRiM of the Russian Federation;
- B) the applicant;
- C) an agreement between the holder of the certificate and the licensor;
- D) the Ministry of the Russian Federation for taxes and duties;
- E) The Ministry of Internal Affairs of the Russian Federation.

23. The nomenclature of goods subject to mandatory certification in the Russian Federation is determined by:

- A) consumer organization;
- B) the applicant;
- C) the national certification body;
- D) experts;
- E) auditors.

24. The nomenclature of goods subject to mandatory certification shall be distributed on imported goods:

- A) yes;
- B) no;
- C) depends on the quality of the goods;
- D) depends on the quantity of goods;
- E) depends on the list of product groups.

25. Conformity marks have systems:

- A) mandatory certification;
- B) voluntary certification;
- C) mandatory and voluntary certification;
- D) testing laboratories;
- E) everything is added.

26. A batch of imported goods is accompanied by a certificate of conformity issued by a foreign body. The certificate will be recognized in Russia if:

- A) its validity has not expired;
- B) the issuing authority is accredited by the FATRiM of the Russian Federation;
- C) the issuing authority is accredited in the IEC / SE system;

D) the issuing authority is accredited in the UNECE system;

E) the issuing authority is accredited in the ROSA system.

27. The right to recognize certificates of conformity for imported goods has:

A) the recipient;

B) the authority of any Kazakhstan system of mandatory certification;

C) GOST R certification system;

D) FATRiM RF;

E) Sanitary and Epidemiological Supervision.

28. Certification of electronic products in the Russian Federation is carried out according to the rules:

A) GOST R system;

B) IET IEC certification system;

C) the MEKSE system;

D) UNECE rule systems;

E) systems of the SSESБ.

29. The right to choose a method for confirming the conformity of goods under the new EU directives is granted:

A) to the manufacturer;

B) a testing laboratory;

C) to the inspection body;

D) expert commission;

E) all of the above.

30. The main way to prove conformity of goods in the EU is:

A) mandatory certification;

B) international certification;

C) manufacturer's declaration;

D) contractual certification;

E) all of the above.

31. The European CE mark confirms the conformity of the goods:

A) European test standards;

- B) the requirements of safety directives;
- C) the international standard ISO;
- D) the concept of TQM;
- E) European quality standard.

32. Joint quality certification is beneficial for:

- A) an exporter of products to Russia;
- B) Russian exporters;
- C) both parties;
- D) enhancing communication with consumers;
- E) production stability.

33. The main objective of the EQNT:

- A) promoting the mutual recognition of certificates of conformity;
- B) inspection of national certification systems;
- C) development of rules for evaluating quality systems;
- D) the development of multilateral cooperation between countries for mutual trust;
- E) all of the above.

34. The following services are subject to certification in Russia:

- A) material;
- B) intangible;
- C) psychological quality;
- D) service time;
- E) all of the above.

35. To confirm the suitability of measuring instruments is carried out:

- A) calibration;
- B) departmental verification;
- C) metrological certification;
- D) supervision of the state of measurements;
- E) certified measurement procedures.

36. System audit is:

- A) conducting internal audits of the quality of work;

- B) conducting external quality control checks;
- C) carrying out corrective measures;
- D) documentation and preservation of archives of all processes;
- E) analysis of the certification system.

37. Confirmation of the supplier in accordance with the goods takes the form:

- A) enterprise standard;
- B) quality certificate;
- C) certificate of conformity;
- D) statements of the declaration of conformity and certificate of conformity;
- E) all of the above.

38. The purpose of the internal quality audit:

- A) obtaining information on the status of quality assurance;
- B) preparation of the test procedure;
- C) test procedure;
- D) verification of control methods;
- E) all of the above.

40. What are the assessments of conformity of the certification object in certification bodies and testing laboratories:

- A) standards for measurement processes;
- B) standards for test processes;
- C) control standards;
- D) audit standards.
- E) all of the above.

41. The conformity mark is:

- A) confirms the quality of the products;
- B) confirms the quantity of products;
- C) confirms the conformity of labeled products;
- D) confirms compliance with state standards;
- E) all of the above.

42. The certificate of conformity is:

- A) a document on the process that complies with the standard;
- B) a document for the service corresponding to the standard;
- C) a document on product quality;
- D) a document comparing information with test results;
- E) all of the above.

43. The conformity mark in the EU certification system is:

- A) the mark must comply with existing directives;
- B) the mark should mean that the product meets the requirements for conformity assessment;
- C) the mark must be affixed to the product;
- D) the mark must indicate the standards to which the product conforms;
- E) the CE mark indicates the conformity of the products with the legislation of the European Community.

44. Appointment of regulations

- A) it is a document with a legal norm;
- B) it is a methodological document;
- C) these are guidelines for control methods;
- D) these are supervision instructions;
- E) all of the above.

45. Purpose of an international standard (ISO)

- A) national standards are being created;
- B) are used for international relations;
- C) provides mutual cooperation;
- D) facilitates the international exchange of goods;
- E) all of the above.

46. The purpose of unification is

- A) the holding of objects of the same purpose for uniformity;
- B) the establishment of a minimum number of types of products;
- C) isolates samples, prototypes of appropriate sizes;
- D) reduces the number of objects according to their applicability;

E) all of the above.

47. Typing is

A) the development and establishment of standard designs;

B) the development of new products;

C) the development and establishment of technological processes for the production of products;

D) the establishment of the relevant series of products;

E) all of the above.

48. Unity and required measurement accuracy by:

A) calibration of metrological certification and verification of SI;

B) metrological certification of measurement procedures;

C) monitoring indicators of measurement accuracy;

D) measurements F.V. comparison method;

E) all of the above.

49. The functions of the FATRiM of the Russian Federation are

A) develops plans for state standardization;

B) provides guidance;

C) approves the standards;

D) establishes units of physical quantities;

E) all of the above.

50. What are the methods of determining quality

A) instrumental methods;

B) expert methods;

C) the sociological method;

D) organoleptic method;

E) all of the above.