

**AL-FARABI KAZAKH NATIONAL UNIVERSITY**  
**Faculty of chemistry and chemical technology**  
**Department of Analytical, colloid chemistry and technology of rare elements**

**Final exam program for the discipline**  
**95353**  
**«Sensory Analysis of Food Products, Examination of Consumer Preference (NCU)»**

Educational program:  
6B07202 «Food chemistry and technology (NKU)»

**Almaty 2023**

Final exam program the discipline is compiled by Madi Abilev, PhD, associate professor of the department of analytical, colloid chemistry and technology of rare elements

Reviewed and recommended at the meeting of the department of analytical, colloid chemistry and technology of rare elements

« 07 » September 2023, Protocol №2

Head of the department \_\_\_\_\_ A.M. Argimbayeva  
(signature)

## **Introduction**

**Exam format:** asynchronous.

**Exam form** – Written exam, case-task.

**Exam platform:** Moodle LMS.

**Exam type** — online

**Exam control** – plagiarism check.

**The exam lasts:** 3 hours.

**On the exam in this discipline, the following types of questions are encountered**

This is a problematic task in which the trainee is asked to comprehend a real professionally oriented situation necessary to solve a problem.

### **Topics for which test tasks will be drawn up**

1. Sensory discrimination testing in food quality control
2. Statistics for use in discrimination testing
3. Applications and limitations of discrimination testing
4. Paired comparison / Directional difference test / 2-Alternative forced choice (2-AFC) test, Simple difference test / Same-different test (ISO 5495:2005)
5. Organoleptic assessment of food quality
6. A-Not-A Test (ISO 8588:2017)
7. Sensory analysis of the properties of natural and drinking water
8. Triangle Test (ISO 4120:2021)
9. Sensory analysis of beverage quality and safety
10. Two-Out-of-Five Test (ISO 6658:2017)
11. Tetrad Test (ASTM E3009-15)
12. Sensory analysis of the quality and safety of milk and dairy products
13. Duo-Trio test (ISO 10399:2017)
14. Sensory analysis of the quality and safety of meat products
15. Difference From Control (DFC) Test (DIN 10976:2016)
16. Sensory analysis of the quality and safety of fish and fish products
17. Ranking Test (ISO 8587:2006)
18. ABX discrimination task
19. Dual-standard test
20. Advances in methods for instrumental assessment of food sensory quality
21. Changing global consumer markets

### **Rules for conducting the exam form**

1. Lecturer of a discipline must prepare a document "Final control of the discipline" in PDF-format, which sets out:
  - rules for conducting the exam;
  - format for presentation of responses;
  - assessment policy;
  - themes of case tasks: individual;
  - schedule (deadlines for assignments).

2. Inform students about the prerequisite - the faces of all group members should be visible on the video, so that the teacher can assess the activity of each participant when discussing the assignment and consider this during certification.
3. According to the dates established in the disposal (order) on loading examination tasks timings, upload prepared PDF-file to the Moodle LMS for the zero week - it is located at the very beginning of the course - until the first week.
4. Lecturer indicates the deadlines and the number of attached files in Moodle LMS.
5. After the time expires, the student will not be able to send files.
6. Inform the students in the general chat where the exam rules and topics of projects or creative assignments are loaded for them.
7. After the deadline lecturer:
8. Checks the final work and reports of students.
9. Checks reports for plagiarism in the Antiplagiat.ru system (required). The teacher, based on the Antiplagiat system report, evaluates the main parts of the report (introductory and main parts, conclusion and literature). Individual project assignments, the student's report is assessed for plagiarism in full.
10. Based on the results of the check, lecturer certifies the participants of the exam:
  - assigns points in the LMS Moodle system;
  - transfers the points in the system to the Univer IS attestation paper.
11. Time for scoring in the attestation paper for an exam - up to 72 hours.

### **Student instruction**

1. At the time set by the teacher, they log in to the Moodle LMS and get access to the task "Final exam on the discipline".
2. Look through the lecturer's assignment.
3. The work is individual, video recording is not required.
4. Carry out the teacher's task
5. Based on the results achieved, they draw up a final report on the work done.
6. According to the schedule of exams (the beginning of the exam is the time of the exam on the schedule, the end is the time of the exam on the schedule + the time set by the teacher to download the answer, 3 hours), students upload the result of the assignment into the LMS Moodle, for this:
  7. students are authorized in the LMS Moodle accounts;
  8. open the element "Final exam on the discipline";
  9. select the item "Add answer to the task";
  10. upload their works in the file upload field;
  11. click "Save", ("Submit for verification"),
  12. if necessary, checks the work for borrowings using the Antiplagiat system. The student will be given 1 attempt to check the written report for originality.
13. The postponement of the uploading of finished works in the Moodle LMS is not allowed!

14. As a result of the exam, the lecturer receives from the students:
  - 1) a completed answer to a case task, drawn up in the form of a report and additional files-attachments to the report in \*.docx format (if necessary, depending on the assignment) from each student.
15. Example of student report content:
16. Introductory part
  - full name of the author;
  - short description of the case task - exactly the task at hand, you do not need to copy the entire teacher's document.
17. Main part:
  - description of the achieved results of the case (directly solving the task in the form of a report, images, links to videos, diagrams, graphs, etc., depending on the task);
  - description of the progress of the case assignment;
  - description of the deviations and difficulties encountered in the course of the case-task, as well as the ways used to overcome them.
18. Conclusion. Conclusions on the work done.
19. References.
  - list of used literature;
  - a description of the methods and technologies used in the case for solving the assigned tasks (programs, tools, links to key regulatory documents, methods).

Each student in his report must write the introductory and main parts, conclusion, literature (all the same, in the case of a group project).

It is allowed to upload final reports only in \*.docx formats. Additional files, if available - images, graphics, listings, etc. depending on the task, can be loaded in the appropriate formats (for this, set the ability to load data files in formats other than docx when creating the "Assignment" element).

The size of uploaded files should not exceed 30 MB. If it is necessary to send large files, students upload files to cloud storage and publish links to them in the text of the report.

### **Evaluation policy**

Each part of the report will be assessed as follows:

1. Introductory part – 5 points
  2. Main part – 50 points, including:
    - description of the achieved results of the case – 20 points;
    - description of the progress of the case assignment – 10 points;
    - description of the deviations and difficulties encountered in the course of the case-task, as well as the ways used to overcome them – 20 points.
  3. Conclusion – 30 points.
  4. Results of plagiarism checking – 15 points.
- Total for the exam – 100 points.

### ***Recommended Literature Sources for Exam Preparation***

1. Harris A. A Sensory Education. - Taylor & Francis, 2021. - 208 p.

2. Hort J., Kemp S.E., Hollowood T. Time-Dependent Measures of Perception in Sensory Evaluation. - Wiley-Blackwell, 2017. - 443 p.
3. Kilcast D. (Ed.) Instrumental assessment of food sensory quality: A practical guide. - Woodhead Publishing Limited, 2013. - 656 p.
4. Næs T., Brockhoff P., Tomic O. Statistics for Sensory and Consumer Science. - Wiley, 2010. - 294 p.
5. Rogers L. Sensory Panel Management: A Practical Handbook for Recruitment, Training and Performance. - Woodhead Publishing, 2018. - 362 p.

## CRITERIA-BASED ASSESSMENT RUBRICATOR

*(for all forms except standard oral/written testing)*

**Discipline:** 95353 Sensory Analysis of Food Products, Examination of Consumer Preference (NCU)

**Form:** Written, case-task. **Platform:** Moodle LMS

№	Score  Criteria	DESCRIPTORS				
		«Excellent»	«Good»	«Satisfactory»	«Unsatisfactory»	
		90-100 %	70-89 %	50-69 %	25-49 %	0-24 %
1.	Suggestion of the optimal way to solve the case	The testing method suggested by a student is well-founded and reasoned; plagiarism check did not found any violence of the authorship; references used are relevant with the focus on the international regulatory documents; the chosen approach is briefly compared with at least two other methods.	The testing method suggested by a student is reasoned and based on the theoretical material of the course; plagiarism checking results are above 80%; references used are relevant; the chosen approach is briefly compared with other methods.	The testing method suggested by a student is based on the theoretical material of the course without the results of self-study; plagiarism checking results are above 50%; references used are relevant with some outdated ones; the chosen approach is not compared with other methods.	The testing method suggested by a student is not well-reasoned; plagiarism checking results are below 50%; references used are not relevant, no international regulatory documents used; the chosen approach is not compared with other methods.	The testing method suggested by a student is not reasoned; plagiarism checking results are below 30%; references used are not relevant, no international regulatory documents used; the chosen approach is not compared with other methods; violation of the final control rules.

