

Approved

Rector of I.K. Akhunbaev KSMA

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MEMC meeting protocol №_____

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PROVISION

ON THE CONTROL OF STUDENTS ' KNOWLEDGE BY THE COMPUTER TESTING METHOD

BISHKEK 2020

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1. General provisions

The Provision regulates the activities of the divisions of the I. K. Akhunbayev Kyrgyz State Medical Academy (KSMA) in organizing and conducting computer testing to control the quality of mastering the main educational programs of higher medical education and students' knowledge.

1.1. This provision has been developed in accordance with the Law of the Kyrgyz Republic "On Education of the Kyrgyz Republic" and other normative legal acts of the Kyrgyz Republic in the field of education and approved in accordance with the procedure established by Kyrgyz Republic government.

1.2. Test computer control of students' knowledge quality (computer testing) is an innovative technology for assessing the quality of students' knowledge in the disciplines of the main educational program (MEP) of all specialties within the framework of the intra-university system of quality control of student training and is used along with other types and forms of control.

1.3. Types of computer testing:

- final testing of the discipline development (semester);
- testing in preparation for the final certification of KSMA graduates (semi-annual certification);
- final testing as a stage of the state final certification (SFC) of graduates.

1.4. Computer testing of students is carried out for the purpose of:

- obtaining independent, objective information about the educational achievements of students, compliance of the content, level and quality of training of students of the Academy with the requirements of the state educational standard (SES) in the disciplines;
- the use of the obtained exam results in the formation of the final rating of the student in the discipline.

1.5. All types of computer testing are regulated by the administrative orders of the Rector of the Academy or the Vice-rector for Academic Affairs.

1.6. The place of computer testing is the KSMA Center for the Development of Clinical Skills and Knowledge Assessment (CDCSKA). The software is implemented by an automated management system by involving software developers with regular updates.

1.7. Terms and concepts used in the Provision:

A *test* task is a minimal content-complete element of the pedagogical dimension, containing the text of the task (question) and having an unambiguous correct answer.

The Test Task Bank (BTZ) is a logically ordered structure of a finite number of test tasks that allows to automatically generating a variety of test forms.

Test is a system of standard form tasks, the performance of which can be quantified (evaluated) and allows to establish the level of formation of knowledge, skills and abilities of the test subject.

Content validity of the test - the degree of completeness and coverage depth of the discipline content in the test tasks.

2. Functions of the departments that ensure the organization and conduct of computer testing

The system of measures for the organization of computer testing, including the procedure (methodology) for the preparation of test tasks and the analysis of test results, is carried out by the Vice-Rector for Academic Affairs, the educational and methodological department, the educational and methodological profile committees (EMPC), the director of the CDCSKA, deans and teachers of departments.

2.1. Responsibilities of EMD:

- organization of the work of departments during the examination sessions;
- preparation of the order for the examination session, including the preparation of the schedule of students computer testing, taking into account the schedule of the educational process and subsequent approval by the Vice-rector for Academic Affairs;
- submitting of the approved schedule of the examination session to departments, deans, CDCSKA;
- control over the computer testing of students according to the approved schedule;
- analysis of the quality of students' mastering of individual disciplines based on the results of examination session, if necessary - adjustment of the educational process.

2.2. Responsibilities of departments:

- development of a bank of test tasks in academic disciplines, including examination and training tests, in accordance with the basic rules for the preparation of test tasks (Appendix 7);
- timely submission of test tasks to the CDCSKA in electronic and paper versions (MS Word);
- annual review and updating up to 20% of the total volume of the bank of test tasks in order to ensure their content validity, taking into account the analysis of the results of previous testing and changes in the content of educational programs;
- consulting students during the examination session on the curriculum issues;

- ensuring the presence of examiners from among the teachers of the department in the computer classes of the CDCSKA during testing in order to monitor students ' compliance with the requirements for the computer testing procedure.

The head of the department is responsible for the content of the tests and their compliance with the SES for the relevant specialty/direction or the requirements of the work program for an academic discipline.

2.3. Responsibilities of the educational and methodological profile committees:

- approval of the specification of test tasks for the current session, taking into account the curriculum of the disciplines, namely, the total volume of test tasks and their distribution by cognitive levels;
- organization of the testological examination of test tasks;
- timely review and approval of exam tests;
- organization and control of the annual review and update of the bank of test tasks.

2.4. Duties of deans of faculties:

- timely submission of lists of students admitted for testing to the CDCSKA;
- preparation of exam sheets;
- providing students with information about the procedure for conducting computer testing at KSMA;
- ensuring student attendance at the exam;
- conducting an analysis of exam results.

2.5. Responsibilities of the CDCSKA staff:

- annual formation of the bank of test tasks in accordance with the current curricula;
- providing input to the database of the contingent of students admitted to the session;
- setting attributes and user rights (usernames and passwords for students);
- providing technical support for the operation of the testing system;
- processing of test results;
- ensuring the confidentiality of test tasks;
- instructing students on the technical side of the computer testing procedure;
- regularly update the computer testing program;
- preparation of a report on the test results at the end of the session.

2.6. Responsibilities of students:

- to come to classroom no later than 10 minutes before the start testing (if testing is conducted in an online format the student must register no later

than 30 minutes after the start exam), otherwise the student is not allowed to take the exam with mark in the examination sheet “failure to appear”;

- present a record book with the dean's office's seal of admission to the exam before the exam begins;
- observe the rules of conduct in computer classes and comply with the requirements of technical administrators and members of the examination board;
- do not disclose attributes (username, password): providing attributes to another person and attempting to falsify test results is a violation of the established testing procedure, which entails the imposition of penalties in the form of cancellation of exam results;
- in the case of online testing, ensure that can identify identity.

3. Algorithm for developing and applying the database of test tasks

3.1. Every year, the departments develop or update the bank of test tasks in accordance with the current curricula, approve at the meeting of the department, which is formalized by the corresponding protocol, and submit for approval to the EMPC no later than October 1 (autumn semester) and March 1 (spring semester) of the current year.

In the case of an interdisciplinary exam, the test tasks are pre-submitted to the module coordinator / representative of the responsible department, who is obliged to compile a single BTT for all disciplines and send it to the EMPC for approval within the above time frame.

3.2. The Chairman of the EMPC appoints experts to conduct a testological and substantive examination of the BTT presented by the department.

The term of the examination is not more than 10 days. If there are any comments on the results of the examination, the experts send them to the developer with an indication of the deadline for eliminating the comments.

3.3. Subsequently, the final versions of the BTT approved by the experts are approved at the meeting of the EMPC and submitted to the CDCSKA in electronic form in Word and PDF formats no later than November 1 (autumn semester) and April 1 (spring semester).

At the same time, the document “Description of the bank of test tasks for placement in the AVN system” is attached to each BTT in PDF format” (Appendix 2).

The responsibility for the safety and confidentiality of the test examination material is assigned to the Director of the CDCSKA and all participants in the test development process.

3.5. Approved examination tests for the current exams and semi-annual certification of final year students are not issued to students.

3.6. Tests for passing the state final certification (SFC) are given to students on hand without specifying the answer options no later than 30 days before the exam.

3.7. Training tests for the current exams on all topics of the working program (in the amount of not less than 25% of the total number of exam tests) are posted on the Moodle platform by each department without specifying the correct answer, within a period of no later than 1 one month from the beginning of the semester.

3.8. The bank of test tasks for the discipline for the current exam is determined by its volume (at least 50 questions per 1.0 credit) and the number of students at the faculty.

3.9. The number of test tasks for passing the interdisciplinary semi-annual certification must be at least 500, for passing the SFC - at least 2000.

4. Testing procedure

4.1. The schedule of computer testing of students is drawn up in accordance with the schedule of the examination session, indicating the time of each exam, approved in accordance teachers and students should be informed about testing by the educational and methodological department at least one month before its start.

4.2. The exam schedule is designed so that at least 2 days (including weekends and holidays) are allocated for the preparation of students for each exam.

4.3. Before each exam, a consultation on discipline issues is provided.

4.4. The teaching staff participating in the examination in the form of computer testing is formed by the department, which is assigned to this academic discipline.

4.5. For the semi-annual and state final certification of graduates, according to the specialties, an examination commission is created each year, which includes teachers of the graduating departments of the KSMA, as well as members of the SAC (for the SFC).

4.6. Passing computer testing, tasks for each student are selected by the program randomly from the bank of test tasks for the corresponding discipline (in accordance with the established parameters), in the amount of no more than 100 questions.

4.7. The student is given time to complete the test tasks at the rate of 1.0-2.0 minutes to complete one task, according to the instructions attached to the tests.

4.8. During the testing in the classroom, except students undergoing testing, the presence of other persons is not allowed, except employees of the CDCSKA and examiners. In addition to the teaching staff-members of the examination

commission specified in the order, the rector, vice-rectors, heads of the relevant departments may be present at the exam.

4.9. During the testing, students are not allowed to use cell phones, cheat sheets, etc. Also, attempts to communicate with other students or other persons, including with the use of electronic means of communication, unauthorized movements of students, etc., are not allowed. These actions are the basis for removing the student from the classroom and then putting the rating "unsatisfactory" in the statement.

4.10. A student who appears for testing, but decides that for health reasons he can not participate in it, must declare this before receiving tasks that are recorded in the exam sheet as "no-show". Otherwise, the refusal to continue participating in the test is recorded as an "unsatisfactory" rating, regardless of the availability of a medical certificate both before and after such an application.

4.11. A valid/respectful reason for non-attendance is considered an illness confirmed by the medical certificate of the student polyclinic presented to the dean's office on the day, which is indicated to start classes; as well as other important reasons confirmed by documents.

4.12. If a student is exempt/free from passing the exam, the department at the end of the test week must provide the dean's office with a statement from the cathedral meeting protocol with the attached agreed list of students and an indication of their final rating in the discipline.

4.13. The maximum number of points that a student can receive passing the exam is 10, the minimum passing score is 6. In case of receiving points below the established threshold (less than 6 points), the student must retake the exam again. At the same time, the exam sheet and the record book are rated "unsatisfactory". At the first retake, the student can get a maximum of 8 points, at the second retake, the maximum score is 6 (see the PRS provisions). The evaluation of the second retake is final.

4.4. After passing the exam, the final rating (FR) of the student is calculated in the discipline, which is transferred on the scale into an assessment and is put in the statement and the record book on the day of passing the exam;

4.5. Filling in the examination sheets and submitting them to the dean's office is carried out by the teachers of the responsible departments on the day of testing.

4.6. The printed examination sheets of the test exam must be kept in the dean's offices and in the relevant departments during the entire period of the student's education, along with the test sheets.

5. Appeal procedure

5.1. The student has the right to appeal the test results. The student to the Vice-Rector for Academic Affairs submits the application for appeal on the day of the

exam. The submitted appeal is considered within three working days by the commission established for this purpose.

5.2. The application must specify the specific grounds for appeal. These may include:

- Inaccuracy in the formulation of questions, their going beyond the scope of the program, errors in the answers of test tasks;
- Violation of the established testing procedure by the examination commission;
- Circumstances that prevent an objective assessment of the work by the examination

board.

5.3. The student's dissatisfaction with the level of the received assessment cannot be the basis for an appeal.

5.4. The Appeal Commission holds a meeting in the presence of the student. If the student does not appear at the meeting of the appeal commission without a documented valid reason, the application is rejected.

5.5. Only the grounds set out in the application are subject to consideration in the appeal process. An additional questioning of the student on the materials of the work and the subject being passed is not provided.

5.6. As a result of the appeal, the exam test score can be changed. The decision on the results of the appeal is made out in a protocol, which is signed by the chairman of the appeal commission.

6. Requirements for the design of test tasks

6.1. Requirements for the format of test tasks:

- font style - Times New Roman;
- font size-14 pt;
- answers are numbered in uppercase Latin letters;
- the correct answer is marked in red

6.2. The set of test materials must contain

6.2.1. Title page, including:

- name of the discipline;
- faculty and course for which the test tasks are intended;

- names of developers (with signatures);
- reviewer data;
- indication of the total number of test tasks, the number of test tasks in one variant, and the total time allowed for the test (Appendix 2).

6.2.2. The specification of the test tasks bank - an extended plan, where all sections of the discipline, the amount of material, the cognitive level (degree of complexity) of test tasks and the percentage of tasks for each topic are recorded. (Appendix 2).

6.2.3. The structure of the student's individual test with an indication of the percentage of test tasks depending on the cognitive level {Appendix 2}.

6.2.3. Two examinations /expertise:

- substantive – is conducted by an associate professor or professor of a related department;
- testological – is carried out by an expert testologist at EMPC;

6.2.4. An statement from the cathedral meeting protocols, signed by the head of the department and confirming the compliance of the content of the test tasks with the curriculum of the discipline

6.2.3. Statement from EMPC meeting protocol.

6.2.4. Main text.

7. Final provision

7.1. Violation of this Provision by the members of the examination committee, dean's offices may be appealed by students on an individual basis. Non-compliance with the Provision is considered as a violation of the established procedure for conducting the educational process.

Basic rules for compiling test tasks

1. The compiling of test tasks bank should be carried out in strict accordance with the work program of the discipline.
2. The test task should be presented in the form of a brief judgment, formulated in clear language and exclude ambiguity.
3. Each test task should be related to a specific fact, principle, skill, knowledge, contain one complete thought, check one element of knowledge.
4. The test task should not reflect the subjective opinion or understanding of the individual author.
5. In the text of the task, repetitions and double negation are excluded.
6. The test task should not contain generalizing words, such as: "always", "never", "sometimes".
7. In the test task, it is not allowed to use such answer options as: "yes", "no", "all answers are correct", "all answers are not correct", "no correct answer", "all options are correct", "no correct answer" , etc.
8. There should be no interrelated tasks where the content of one task prompts the answer to another task.
9. Avoid questions that can be answered on the basis of general information erudition without special knowledge obtained in the study of this discipline
10. There should be no unintended hints in the tasks and response samples. The answer options for each task should be selected in such a way that the possibility of a simple guess or discarding a deliberately inappropriate answer is excluded.
11. The length of the answer options should contain approximately the same number of characters, i.e. one answer should not differ significantly in volume from the others.
12. Be sure to follow the same style of tests design that are part of the same test tasks bank.

13. The test material must contain tasks of all levels cognitive skills (memorization, understanding, application)

Appendix 2

DESCRIPTION OF THE TEST TASKS BANK

to be placed in the AVN system

Name of the discipline:

Name of the test task bank:

Form of training:

Code and name of the specialty:

Semesters of study:

Form of knowledge control:

(final control of the discipline, semi-annual certification, state exam)

Author's team/compilers (indicating the department, position/title) (with signatures):

1.

2.

3.

4.

Reviewers: (indicating the position, surname and initials of the experts who conducted the testological and substantive examinations) (with signatures)

Date of compiling: " _____ " 20__

Number of test tasks in 1 variant:

Time limit:

Rating scale: 59% or less – “unsatisfactory”

60-75% - “satisfactory”

76-85% - “good”

86-100% - “excellent”

Specification of the test task bank

№	sections name of discipline content	Number of hours	specific gravity/weight in%	Number of test tasks	Cognitive levels %		
					memorizing	understanding	applying
1	«.....»						
2	«.....»						
3	«.....»						
4	«.....»						
5	«.....»						
	total		100%				

Structure of the individual student test

Cogitiv level	Number of test tasks %
Memorizing	
Understanding	
Applying	