# Ministry of Science, Higher Education and Innovations of the Kyrgyz Republic Scientific Educational and Industrial Complex

"Jalal-Abad State University named after B. Osmonov"

REVIEWED

at the meeting of Academic

Council of JASU named after

B.Osmonov

Minutes No. \_\_\_\_\_\_

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APPROVED

by the Rector of JASU named

after B.Osmono

Regulation on the Development of Test Items for Modules and Examinations

Amendments and additions were made by the Academic Council of JASU, Minutes No. 1, September 1, 2025

#### 1. General Provisions

- **1.1.** In accordance with the Resolutions of the Cabinet of Ministers of the Kyrgyz Republic No. 590 dated September 24, 2024, and No. 329 dated June 10, 2025, as well as based on the following regulations of Jalal-Abad State University named after B. Osmonov "Regulation on the Module-Rating System for Assessing Students' Academic Achievements", "Regulation on the Current and Midterm Assessment of Students at JASU," "Regulation on the Assessment of Students' Knowledge through Computer-Based Testing," and "Regulation on the Implementation of Students' Independent Work" amendments and additions have been introduced to the "Regulation on the Development of Test Items for Modules and Examinations".
- **1.2.** The Regulation 'On the Development of Test Items for Modules and Exams' regulates the rules for preparing tests, measures to improve the quality of test assignments, the responsibilities of the parties responsible for the quality of tests, the procedures for uploading test items to the AVN portal, and also defines the actions of responsible persons in the preparation and approval of test items.
- **1.2.** Computer-based testing for assessing students' knowledge is conducted in the AVN system in accordance with this Regulation.
- **1.3.** Testing is the most common and effective method of assessing students' knowledge. Its features include:
  - Objectivity;
  - Promptness and efficiency;
  - Simplicity and accessibility;
  - Computer processing of results using statistical evaluation methods and registration;
  - The ability to evaluate the results of all students' independent work.
- **1.4.** The following principles shall be observed when preparing test items:
  - **Validity** (the extent to which the test items accurately measure the intended learning outcomes);
  - Complexity (the balance of tasks across different levels of difficulty);
  - **Reliability** (correct and adequate reflection of the student's level of knowledge);
  - **Stability** (ensuring equal significance for different groups of students taking the test);
  - **Representativeness** (the degree to which the items cover the full scope of the discipline);
  - **Relevance** (ensuring that the test items are up-to-date);
  - **Sufficiency** (correspondence of the test items to the teaching methodology and the current achievements of science in the study material).
- **1.5.** Test items for all disciplines shall be developed at three levels according to the scope and nature of the questions.

## **Level 1 – Primary and Operational Level Test Items**

Primary test items correspond to the first "factual" level of knowledge and are

primarily aimed at accumulating the "knowledge fund" based on factual information.

**Operational level** test items involve performing logical operations according to prepared models, forming the basis of skills and individual systemic associations, as well as establishing connections between acquired knowledge within a section or subsection.

#### Level 2 – Analytical-Synthetic Level Test Items

When developing analytical-synthetic level test items, students demonstrate skills in generalizing and differentiating stable knowledge, linking previously acquired knowledge with new information, identifying the main ideas and key principles of a topic or section, uncovering various relationships, and drawing analogies.

#### **Level 3 – Evaluative and Creative Level Test Items**

Creative-level test items require students to apply their knowledge to new situations, develop non-standard cognitive and practical approaches, and demonstrate higher-order problem-solving and evaluative skills.

#### 2. Development of Test Items

A test is a means of assessing student readiness, consisting of test items and answer options, among which one is correct.

- **2.1.** Test items should be concise, clear, thought provoking, familiar to students, and formulated to prompt recall of previously studied material.
- **2.2.** Each test item must include: assessment rules (mark the correct answer, match items, determine sequence, find incorrect answer, etc.), posed questions (e.g., what? why? how? when? who?), and at least four answer options, one of which is correct. 2–3 minutes are allocated per test item.
- **2.3.** Tests developed for each discipline and they include the following five types of items:
- Closed-ended test items;
- Open-ended test items;
- Matching items;
- Sequence determination items;
- •Items including images or graphical material
- **2.4.** When writing answer options for test items, the following requirements shall be observed:
- Answers should not be too long. Identical words or phrases must not be used across different answer options.
- All answer options should be similar in meaning, with only one correct option.
- All answer options should be of similar length, and the correct answer should not stand out.
- Answers should not contain terms unfamiliar to students.
- When compiling the answer choices for test items, the phrases "all are correct," "all are incorrect," "I don't know," "yes," and "no" shall not be used. Such phrasing may lead the student to easily identify the correct answer.
- Questions should not exceed 9–12 words; overly long questions are difficult for students to understand and require excessive time to read and process.
- Students are allocated 30 minutes to complete test items for a single subject on

the AVN portal; however, the instructor may extend this time depending on the level of difficulty of certain subjects

#### 3. Responsibility of the Subject Instructor for the Development of Test Items

- **3.1.** The development of test items for a discipline is assigned to the subject instructor, who is obliged to prepare the test items in accordance with the requirements of this Regulation.
- **3.2.** When developing test items, the instructor must ensure full coverage of the study material in the course syllabus as well as the material designated for students' independent work.
- **3.3.** Tests shall be developed taking into account the levels of difficulty of the questions: easy, medium, and difficult, and shall include items assessing students' independent work. The number of test items shall correspond to the number of credits allocated for the discipline in the academic plan.
- **3.4.** The instructor is required to upload the test items without answers to the "Knowledge Assessment" section on the AVN portal.
- **3.5.** When developing test items for modules, the repetition of the same question among easy, medium, and difficult items is not allowed; items must not be copied from each other. Repetition of test items from the first module in the second module is also prohibited.
- **3.6.** The instructor shall upload the prepared test to Program No. 37 on the AVN portal and submit it to the Testing Center.
- **3.7.** If a discipline is taught by several instructors and the course syllabus is unified, they may jointly develop the test items for this subject and upload a single set of test items to the AVN portal.

# 4. Procedure for Reviewing the Quality of Test Items

- **4.1.** Direct responsibility for the quality of test items lies with the instructor who developed the test, the head of the department responsible for the program, or the Chair of the Subject Cyclical Commission (in colleges).
- **4.2.** Test items prepared by the instructor shall be submitted to the head of the department or the Chair of the Subject Cycle Commission for review.
- **4.3.** Test items that receive a positive review shall be considered by the head of the department or the Chair of the Subject Cycle Commission at a departmental or commission meeting. During the meeting, their compliance with the course syllabus is checked and approved by protocol. Afterwards, they are recommended for consideration by the Methodological Council of the institute or college. Upon review and approval by the Methodological Council, permission is granted to upload the test items to the AVN portal.
- **4.4.** Test items shall be reviewed at the departmental or commission meeting no later than 15 days before the start of the module and submitted to the Testing Center no later than 10 days prior.
- **4.5.** When submitting prepared test items to the Testing Center for uploading to the AVN portal, the instructor must attach the departmental or commission decision confirming the compliance of the test with the requirements, as well as the review. The decision may cover test items for multiple subjects.

## 5. Requirements for Uploading Test Items to the AVN Portal

- **5.1.** The instructor submits their test assignments in electronic form to the Testing Centre (TC) department, signs a specially created logbook to confirm submission, and presents the signed decision of the department or Subject Cyclical Commission **5.2.** When accepting test assignments, the relevant specialist from the testing center pays attention to the following:
- Absence of extraneous characters in the test;
- Text is written in Kyrgyz using the KY or Times New Roman font;
- Full compliance with the requirements of Program 37 of the AVN portal, if the test items include images;
- Complete entry of test items into Program 37 of the AVN portal, including all answers, etc.

#### 6. Requirements for the Number of Test Items

- **6.1.** Tests developed for modules in various disciplines are divided into examination and credit tests depending on the number of credits in the academic plan. During the module, students' independent work, as provided in the academic plan, is also assessed in the form of test items.
- **6.2.** Examinations are one of the main forms of intermediate knowledge assessment and aim to evaluate students' work during the semester, the extent of mastery of theoretical knowledge, skills in independent work, and the ability to synthesize acquired knowledge and apply it to solve practical and professional tasks.
- **6.3.** If a discipline has 1–2 credit hours, a minimum of 180 questions shall be prepared, including 90 questions for current assessment and 90 questions for students' independent work. If a discipline has 3, 4, 5, 6, or more credit hours, a minimum of 270 questions shall be prepared, including at least 135 questions for current assessment and at least 135 questions for students' independent work.

For subjects that require an examination:

	Number of test assignments			Level of difficulty of test tasks and distribution, amount of independent work							
Credit amount	Total	Mid-term control	Independent work of students	M1. Easy	M1. Medium	M1. Complex	Independent work of students	M2. Easy	M2. Medium	M2. Complex	Independent work of students
1 or 2	180	90	90	15	15	15	45	15	15	15	45
3, 4, 5, 6 or more	270	135	135	23	23	22	68	23	22	22	67

**6.4.** In the event that an examination for a discipline is not stipulated, the credit (pass grade) serves as a form of evaluating the student's theoretical knowledge, and acts as a form of verifying the student's completion of laboratory work, calculation and graphic assignments, term papers (projects), practical and seminar classes, and other types of academic activities.

For disciplines in which the final form of assessment is the credit, (pass grade)

	Num	ber of test as	ssignments	Level of difficulty of test tasks and distribution, amount of independent work				
Credit amount	Total	Mid-term Control	Independent Work of students	M1. Easy	M1. Medium	M1. Complex	M1. Independent Work of students	
1 and 2	180	90	90	30	30	30	90	
3,4,5,6 and more	270	135	135	46	45	44	135	

For disciplines delivered in the college for students admitted after 9 years of basic education (first year), the test items shall be prepared as follows

A discipline (academic course) with a workload of 20–40 hours	A discipline (academic course) with a workload of 60 hours	A discipline (academic course) with a workload of 80 hours	A discipline (academic course) with a workload of 100 hours	For a discipline (academic course) with a workload exceeding 120 academic hours
100	120	140	160	180

In colleges, 20 questions per subject are included for each module test on the AVN portal.

#### 7. Rules for Computer-Based Testing

**7.1.** Before conducting module tests, examinations, and credits (pass/fail grade), institutes and colleges prepare a special schedule indicating the test dates for students. This schedule shall be approved by the Academic Department and confirmed by the Department of Academic Policy.

- **7.2.** Computer-based testing is conducted in designated computer classrooms according to the approved schedule. Supervising instructors are appointed for each classroom, and a registration sheet is filled out for each student group.
- **7.3.** The duration of the test is determined depending on the specifics of the discipline. Generally, 30 minutes are allocated for each subject. For disciplines requiring calculations such as Mathematics, Physics, Chemistry, etc. the duration is extended to one hour. During a module test, examination, or a pass grade, each student is provided with 30 questions.

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