

**EVALUATION CRITERIA**  
**Microbiology, Virology and Immunology**  
**for students of II-III courses of the Medical faculty**  
**(specialty 222 «Medicine»)**

**Technique and features of standardized estimates for current educational activities**

**Method of conducting control measures**

Current control is carried out on every practical class according to the specific goals of each topic.

At each practical class the student answers 5 tests on the topic of the lesson (including tests with several correct answers), 2 standardized questions, which include questions from the lecture course and the question of independent work; resolve 1 case studies (with 3 questions); demonstrates knowledge and practical skills in accordance with the topic of practical classes.

**Criteria for assessing student's current education activity**

At each practical lesson, the assessment of each student's knowledge is carried out in a four-point system.

**Excellent ("5")** - A student correctly answers 90-100% of tests. For all questions are correctly, clearly, logically and fully answers. Can closely connect the theory and practice, correctly demonstrates the implementation of practical skills. Solves situational problems of increased complexity, is able to generalize material, possesses research methods to the extent necessary for the activities of the physician.

**Well ("4")** - The student answered correctly 70-89% of the tests. The answered of the question are correctly and essentially. Demonstrates performance of practical skills. Correctly uses theoretical knowledge in solving practical problems. Is able to solve light and medium complexity situational tasks. Has the necessary practical skills and methods of their implementation in an amount that exceeds the required minimum.

**Satisfactory ("3")** - The student correctly answered 60-69% of the tests. Incomplete, with additional questions, answers the question. Cannot build a clear independently, logical answer. When answering and demonstrating practical skills, the student makes mistakes. Student solves only the easiest tasks, has only a minimum of research methods.

**Poor ("2")** - The student responded to less than 60% of the tests. Does not know the material of the current topic, cannot construct a logical answer, does not answer additional questions, does not understand the material. During the response and demonstration of practical skills makes significant, gross mistakes.

**Evaluation of the theoretical question:**

"5" - the answer is correct, complete

"4" - the answer is correct, incomplete

"3" - the answer with errors is incomplete

"2" - the answer is not in essence, it is illogical

**Assessment of case studies:**

"5" - correct, complete answers to all questions

"4" - correct, complete answers to two questions

"3" - the correct, complete answer to one question

"2" - the answers to all questions are incorrect or missing

At each practical lesson students' knowledge is assessed on a four-point system ("5", "4", "3", "2") according to the criteria for assessing the student's current activity. **The maximum number of points** that a student can get for current educational activity at studying a subject is 120 points.

**The minimum number of points** that a student should get for current educational activity for admission the subject is 72 points.

Calculating the number of points is based on received by the student marks by the traditional scale while studying a subject during the semester, by calculating the average arithmetic (AA), rounded to two decimal places. The resulting mark is converted into points for multipoint scale as follows:

$$= AA \times 120/5$$

**Independent work of students** is evaluated during the current control of theme in the appropriate class. Mastering of themes which are submitted only to the independent work is controlled at the final control.

**Final control** is carried out to assess the results of study on a particular educational qualification level and on some of its completed stages by the national scale and scale ECTS. Final control includes semester control and students certification.

Semester control is carried out in the forms of semester exam or test (differentiated test) from a specific discipline in the volume of educational material, determined by the working program on the discipline and in terms determined by the working curriculum, individual curriculum of the student.

### **Technique and features of standardized assessment during the examination**

#### **Examination regulations**

The exam consists of the following stages:

Stage I - Written response to A test tasks (blank test control).

The student meets the test package. Each package contains 40 tests of format A for the topics of each content module.

Stage II - a written answer is deployed on 4 theoretical questions and 2 situational tasks.

The student receives a block of questions - 4, which must be answered in writing, as well as a block of situational tasks -2, which must be solved in writing.

Stage III - testing of Practical Skills. The student demonstrates knowledge and performance of 2 practical skills.

#### **Criteria for evaluating final control**

The correct answer for each of the 40 test questions of A format is estimated at 1 point.

Evaluation of each of the 4 theoretical issues is carried out as follows:

5 points - the student correctly, clearly, logically and deployed answers the question.

4 points - the student is correct, in essence, but incompletely answers the question.

3 points - the student does not fully answer the question, makes mistakes.

0-2 points - the student mistakenly answers the question, does not know the material, makes significant, gross mistakes.

The assessment of each of the 2 **case studies** is carried out as follows:

5 points - the correct complete answers to the questions of the task.

4 points - correct incomplete answers to questions.

3 points - answers to the questions are incomplete, with errors.

0-2 points - the answer is incorrect or missing.

Evaluation of the footprint of 2 **practical skills** is carried out as follows:

5 points - correctly demonstrates the implementation of practical skills, accurately, clearly and logically interprets the results of the recording of serological reactions, antibioticograms, accurately and fully describes the microscopic picture, correctly observes the cultural and biochemical

properties of microorganisms, determines the factors of pathogenicity, clearly and logically interprets the results of the recorded accounting. Closely connects theory with practice.

4 points - correctly uses theoretical knowledge for solving practical problems. Has the necessary practical skills and methods of their implementation in an amount that exceeds the required minimum.

correct incomplete answers to questions.

3 points - when demonstrating practical skills and answers, the student makes mistakes.

0-2 points - the answer is incorrect or missing.

### Exam Evaluation Table

| Test for control   | Writing control  | Demonstrating of practical skills |                  |                  |                  |                  |                  |                  |
|--|------------------|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|  |                  | Theoretical questions             | Case studies     |                  |                  |                  |                  |                  |
|  | 1                | 2                                 | 3                | 4                | 1                | 2                | 1                | 2                |
| “5” – 36-40 points (91-100%) correct answer on MCQ Test  | “5” – 5 points   | “5” – 5 points                    | “5” – 5 points   | “5” – 5 points   | “5” – 5 points   | “5” – 5 points   | “5” – 5 points   | “5” – 5 points   |
| “4” – 29-35 points (71-90%) correct answer on MCQ Test   | “4” – 4 points   | “4” – 4 points                    | “4” – 4 points   | “4” – 4 points   | «4» - 4-5 points | «4» - 4-5 points | «4» - 3-4 points | «4» - 3-4 points |
| “3” – 24-28 points (60-70%) correct answer on MCQ Test   | “3” – 3-4 points | “3” – 3-4 points                  | “3” – 3-4 points | “3” – 3-4 points | «3» - 3-4 points | «3» - 3-4 points | «3» - 2-3 points | «3» - 2-3 points |
| “2” – 0 points. Less than 60% correct answer on MCQ Test | “2” – 0-2 points | “2” – 0-2 points                  | “2” – 0-2 points | “2” – 0-2 points | “2” – 0-2 points | “2” – 0-2 points | 2” – 0-2 points  | 2” – 0-2 points  |

**The maximum number of points** that a student can get in the exam is 80.

The exam has been compiled - the student has scored 50 points or more.

The exam has not been compiled - the student has scored less than 50 points.

**The number of points awarded to students at the completion of discipline is calculated as the sum of points for the current academic activity and marks for the final examination (exam).**