

Criteria of Students' Knowledge Assessment for the Medical Faculty for International Students (English medium)

BIOLOGICAL CHEMISTRY

Assessing the students is based on the following 10-point (score) scale.

10 (ten) points:

- Systematized, deep and comprehensive knowledge in all areas of the curriculum as well as on the major issues that go beyond its limits;
- Accurate use of scientific terminology, logical presentation of correct answers to questions;
- Expressed ability to solve independently complex problems in unfamiliar or risk situation;
- A complete and thorough understanding of basic and additional medical literature;
- The ability to navigate (to orient) in the theories, concepts and directions in the discipline of the curriculum, give them own evaluation and to use scientific achievements of other disciplines;
- A creative individual work at practical classes, active participation in group discussions, a high level of task execution.

9 (nine) points:

- Systematized, deep and comprehensive knowledge in all areas of the curriculum;
- Accurate use of scientific terminology, logical presentation of correct answers to questions;
- The ability to solve independently complex problems in an irregular situation within the curriculum;
- Complete assimilation of the basic and additional literature on the subject;
- The ability to navigate (to orient) in the basic theories, concepts and directions of the discipline being studied and give them a critical evaluation;
- Individual work in practical and laboratory classes.

8 (eight) points:

- Systematized, deep and comprehensive knowledge of all the issues covered in the volume of the curriculum;
- Use of scientific terminology and stylistically competent, logical presentation of correct answers to questions, the ability to make informed judgments;
- The ability to solve independently complex problems within the curriculum;
- Mastering the basic and additional literature on the subject;
- The ability to navigate (to orient) in the basic theories, concepts and directions of the studied discipline and give them an objective evaluation;
- Active individual work at practical, laboratory tasks; systematic participation in group discussions.

7 (seven) points:

- Systematized, deep and comprehensive knowledge in all areas of the curriculum;
- Use of scientific terminology, linguistically and logically correct statements answering the questions, the ability to make informed judgments;
- Mastering the basic and additional literature on the subject;
- The ability to navigate (to orient) in the basic theories, concepts and directions of the studied discipline and give them a critical evaluation;
- Individual work at practical, laboratory exercises and situational tasks, rare participation in group discussions.

6 (six) points:

- Sufficiently complete and systematized knowledge within the curriculum;
- The use of the necessary scientific terminology and stylistically competent, logical presentation of correct answers to the questions, the ability to make informed judgments;
- The ability to apply their own standard solutions within the curriculum;
- Mastering of the basic literature on the subject;
- The ability to navigate in the basic theories, concepts and directions of the studied discipline and give them a comparative evaluation;
- Active individual work in practical, laboratory tasks, periodic participation in group discussions.

5 (five) points:

- Sufficient knowledge to the extent of the curriculum;
- Mastering of the basic material on the subject;
- Use of scientific terminology, logical presentation of answers to questions, the ability to draw conclusions;
- The ability to navigate (to orient) in the basic theories, concepts and directions of the studied discipline and give them a comparative evaluation;
- Individual work at practical, laboratory exercises and tasks; participation in group discussions, a high level of culture in task execution.
- The ability to apply their own standard solutions within the framework of the curriculum.

4 (four) points:

- Sufficient knowledge within the educational standard;
- Mastering the basic literature;
- Use of scientific terminology, logical presentation of answers to questions, the ability to draw conclusions without significant errors;
- The ability to solve standard (model) problem under lecturer's supervision;
- The ability to navigate (to orient) in the basic theories, concepts and directions of the studied discipline and evaluate them;
- Work under the guidance of a lecturer in the practical and laboratory classes.

3 points:

- Incomplete knowledge of the studied material within the framework of the curriculum;
- mastering of the basic material on the subject;
- Use of scientific terminology, the presentation of answers to questions with significant linguistic and logical fallacies;
- The inability to navigate (to orient) in the basic theories, concepts and trends of the studied subject;
- Passivity in the practical and laboratory classes.

2 (two) points:

- Fragmentary knowledge of the educational curriculum on the subject;
- Knowledge of separate recommended educational material;
- The inability to use the scientific terminology of the discipline, the presence of rough stylistic and logical errors in the answer;
- Passivity at practical and laboratory classes, low cultural level of task execution.

1 (one) point:

- Lack of knowledge and competence within the framework of the curriculum or refusal to answer at all.

CRITERIA FOR ASSESSMENT OF THE RESULTS OF MCQ TESTS:

- Up to 24% of correct answers - 1 point – failed;
- 25 - 34% of correct answers - 2 points – failed;
- 35 - 44% of correct answers - 3 points – failed;
- 45 - 54% of correct answers - 4 points – tested or passed;
- 55 - 64% of correct answers - 5 points – tested or passed;
- 65 - 74% of correct answers - 6 points – tested or passed;
- 75 - 82% of correct answers - 7 points – tested or passed;
- 83 - 89% of correct answers - 8 points – tested or passed;
- 90- 95% of correct answers - 9 points – tested or passed;
- 96-100% of correct answers - 10 points – tested or passed.

The students are supposed to answer 20 questions during intermediate MCQ tests, and 40 questions during the final MCQ test.

ASSESSMENT OF PRACTICAL SKILLS ON BIOLOGICAL CHEMISTRY

The student should possess following skills during biochemical investigations in practical classes:

- 1) To follow regulations with handling biological samples and chemistry laboratory safety rules;
- 2) To measure accurately the volume of solutions and biological fluids with automatic pipettes;

- 3) To incubate examined samples in the thermostat according to instructions;
- 4) To measure light absorbance (extinction) of colored solutions on a photoelectrocolorimeter;
- 5) To carry out the color reactions on proteins and amino acids: biuret, ninhydrin, xanthoproteic tests, and Fohl reactions;
- 6) To precipitate proteins from solutions using the salting out technique and denaturation with HNO₃;
- 7) To perform laboratory tests for determining of key diagnostical substances in the blood and urine:
- 8) To be able to use and interpret the results of urine express tests for detection of substances for diagnostical purposes.

Assessment of practical skills in performing laboratory investigations is carried out at each laboratory class with the following notes in the group register:

«**passed**» - « + »

«**failed**» - « - ».

The final assessment of practical skills is carried out at the end of the 3rd semester or an academic year after reviewing all laboratory protocols. In case of an uncompleted and unsigned laboratory protocol (protocols), the student is considered to have not fulfilled the curriculum and is not admitted to the final exam.

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professor

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It was approved by the meeting
of Department of Biochemistry
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