

Criteria of Assessment of the 2th Year Students of the Medical Faculty for International Students (English medium)

Discipline BIOCHEMISTRY

The oral response (**interview**) grading is based on the following basic criteria:

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 (to orient) 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 (three) 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 at practical and laboratory classes, low cultural level of task execution

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 response;
- 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.

For computer knowledge test points (scores) and grades are given by the following criteria:

- 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.

In the course of studying biochemistry, the student must master the following **practical skills**:

1. to observe necessary rules and requirements when working with biological materials at the biochemical laboratory;
2. to measure exact volumes of solutions and biological fluids with pipettes;
3. to use of laboratory centrifuge;

4. to determine extinctions of colored solutions by the photoelectrocolorimeter.
5. be able to separate homogenates by centrifugation or filtration to obtain sediment and supernatant;
6. be able to carry out colour reactions for proteins and amino acids (biuret, ninhydrin);
7. be able to carry out the reactions of precipitation of proteins using of various types of precipitating agents (salting out; denaturation with HNO_3)
8. be able to determine the velocity of enzymatic reaction on the concentration of substrate or product as well as calculate activity of the enzyme;
9. be able to carry out laboratory techniques to determine of major biochemical components in the biological material;
10. be able to use stripe express tests for determine substances in the urine for diagnosis.

Evaluation of practical skills in the form of laboratory work is carried out at each practical class with the following marks in the register:

“passed” – “+”

“not credited” – “-“.

If a laboratory class is not passed, the student fulfills (rework) it in the routine order.

The final assessment of practical skills at the end of 3rd semester or academic year is carried out on the fact of all credited laboratory work that must be completed according to the curriculum. In the presence of unaccounted practical classes, the student is considered not to have completed the curriculum.

Head of department of Biochemistry,
professor

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It was approved by the meeting
of department of Biochemistry
protocol № 1 from 30.08. 2021