Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS FOR DISCIPLINE

FUNDAMENTALS OF SALIVA DIAGNOSTICS

Training program (specialty): 31.05.03 DENTISTRY

Department: Biochemistry named after G.Ya. Gorodisskaya

Mode of study: full-time attendance

Nizhniy Novgorod
2021

1. Bank of assessment tools for the current monitoring of academic performance, mid-term assessment of students in the discipline / practice

This Bank of Assessment Tools (BAT) for the discipline "FUNDAMENTALS OF SALIVA DIAGNOSTICS" is an integral appendix to the working program of the discipline "FUNDAMENTALS OF SALIVA DIAGNOSTICS". All the details of the approval submitted in the WPD for this discipline apply to this BAT.

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the academic material by students in the discipline/ practice:

No.	Assessment tool	Brief description of the assessment tool	Presentation of the assessment tool in the BAT
1	Test №1 Test №2	A system of standardized tasks that allows you to automate the procedure of measuring the level of knowledge and skills of a student	Bank of test tasks
2	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of the material comprehension, the ability to apply theoretical knowledge in practice.	List of tasks
3	Report	The product of the student's independent work, which is a public performance on the presentation of the results of solving a specific educational, practical, educational, research or scientific topic	Topics of reports, messages

3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools

Code and formulation of competence*	Stage of competence formation	Controlled sections of the discipline	Assessment tools
PC-1 Prevention of the occurrence and (or) spread of dental diseases, their early diagnosis, identification of the causes and conditions for the occurrence and development, as well as prevention.	Current	**Section 1**. Biochemistry of the oral fluid. **Section 2**. Biochemical aspects of pathological conditions of the oral cavity. **Section 3.** Methods of saliva diagnostics. Practical salivalogy in assessing the state of health. Saliva screening tests.	1 1,2 3

* - not provided for postgraduate programs

4. The content of the assessment tools of entry, current control

Entry /current control is carried out by the discipline teacher when conducting classes in the form of: assessment tool 1, assessment tool 2, etc.

Assessment tools for current control.

4.1. Assessment tool 1. Tests for the assessment of competence "PC-1".

1. Biochemistry of the oral fluid.

1. What form of pathology develops in case of fluoride deficiency in drinking water?
1) Fluorosis
2) Dental caries
3) Periodontal disease
4) Dental calculus
2. Choose the correct statement. Gingival fluid:
1) the chemical composition is close to blood serum
2) contains a lot of Mg, Fe, Cu, Zn
3) contains mucin
4) water accounts for 50%
3. The main source of calcium and phosphorus intake in tooth enamel:
1) gingival fluid
2) saliva
3) blood plasma
4) extracellular fluid
4. Describe the functions of mucin, one of saliva's own proteins.
1) Retains Ca in saliva
2) Participates in the hydrolysis of food polysaccharides
3) Provides antioxidant protection
4) Determines the viscosity of saliva
5. Describe the functions of lysozyme.
1) Retains Ca in saliva
2) Provides antibacterial protection
3) Participates in the breakdown of phosphoether bonds
4) Forms kinins - factors regulating vascular tone

2. Biochemical aspects of pathological conditions of the oral cavity.

1. Shifting saliva pH towards the acidic side leads to:
1) calcification of tooth tissue
2) demineralization of enamel and the development of caries
3) fluorosis
4) mineralization of tooth tissue

2. Shifting saliva pH to the alkaline side is a risk factor for the development of:
1) dental calculus
2) caries
3) fluorosis
4) periodontal disease
3. Increased fluoride content in drinking water> 1.5 mg / ml leads to the development of:
1) enamel hyperplasia
2) enamel hypoplasia
3) periodontitis
4) endemic fluorosis
3. An increase in the activity of which enzyme in the oral fluid can serve as a measure of bacterial contamination of the oral cavity?
1) Amylase
2) Lipase
3) Urease

4) Lysozyme

5. How does the content of thiocyanates change in the saliva of smokers in comparison with non-smokers?

1) Increases

2) Decreases

3) Does not change

4) First decreases and then returns to normal level

4.2. Assessment tool 2. Situational tasks for the assessment of competence "PC-1".

Task 1. How does the content of mineral components in mixed saliva change with age?

Task 2. Why do patients with diabetes mellitus have a manifold increased risk of developing multiple caries?

Task 3. Analysis of the saliva of a patient with periodontitis showed a decrease in catalase activity. What reaction does catalase catalyze? What other enzymes can be altered?

4.3. **Assessment tool 3.** Topics of reports for the assessment of competence "PC-1".

1. Modern salivary screening tests.
2. Diagnostic value of saliva crystallography method.
3. Determination of saliva components in the diagnosis of diseases of the oral cavity.
4. Practical salivalogy in assessing the health status of children.

5. The content of the assessment tools of mid-term assessment

Mid-term assessment is carried out in the form of a credit.

6. Criteria for evaluating learning outcomes

For the credit (example)

Learning outcomes	Evaluation criteria	
	Not passed	**Passed**
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes.	The level of knowledge in the volume corresponding to the training program. Minor mistakes may be made
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes.	Basic skills are demonstrated. Typical tasks have been solved, all tasks have been completed. Minor mistakes may be made.
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes.	Basic skills in solving standard tasks are demonstrated. Minor mistakes may be made.
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no willingness to solve the tasks qualitatively	Educational activity and motivation are manifested, readiness to perform assigned tasks is demonstrated.
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve practical (professional) tasks. Repeated training is required	The competence developed meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) tasks.
The level of	Low	Medium/High

competence formation*		

* - not provided for postgraduate programs

For the exam (example)

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes	The minimum acceptable level of knowledge. A lot of light mistakes were made	The level of knowledge in the volume corresponding to the training program. A few light mistakes were made	The level of knowledge in the volume corresponding to the training program, without errors
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	Basic skills are demonstrated. Typical problems with light mistakes have been solved. All tasks have been completed, but not in full.	All basic skills are demonstrated. All the main tasks have been solved with light mistakes. All tasks have been completed, in full, but some of them with shortcomings	All the basic skills were demonstrated, all the main tasks were solved with some minor shortcomings, all the tasks were completed in full
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	There is a minimal set of skills for solving standard tasks with some shortcomings	Basic skills in solving standard tasks with some shortcomings are demonstrated	Skills in solving non-standard tasks without mistakes and shortcomings are demonstrated
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve professional tasks. Repeated training is required	The formation of competence meets the minimum requirements. The available knowledge and abilities are generally sufficient to solve professional tasks, but additional practice is required for most practical tasks	The formation of competence generally meets the requirements, but there are shortcomings. The available knowledge, skills and motivation are generally sufficient to solve professional tasks, but additional practice is required for some	The formation of competence fully meets the requirements. The available knowledge, skills and motivation are fully sufficient to solve complex professional tasks

Learning outcomes	Assessment of competence developed			
	unsatisfactory	**satisfactory**	**good**	**excellent**
			professional tasks	
The level of competence formation*	Low	Below average	Intermediate	High

For testing:

Mark "5" (Excellent) - points (100-90%)
Mark"4" (Good) - points (89-80%)
Mark "3" (Satisfactory) - points (79-70%)

Less than 70% – Unsatisfactory – Mark "2"

Developer(s):
Zagoskin Pavel Pavlovich, Ph.D., Associate Professor of the Department of Biochemistry named after G.Ya. Gorodisskaya
Barinova Oksana Vladimirovna, Ph.D., Associate Professor of the Department of Biochemistry named after G.Ya. Gorodisskaya