

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 ENDOCRINOLOGY**

Training program (specialty): 31.05.01 General medicine

Department: Endocrinology and internal diseases

Mode of study: Full-time form of education

Nizhniy Novgorod  
2021

This Fund of Evaluation Funds (FOS) for the discipline "Fundamentals of Endocrinology" is an integral part of the work program of the discipline "Fundamentals of Endocrinology ". This FOS is subject to all the details of the approval presented in the RPD for this discipline.

**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 "Name of discipline / practice" is an integral appendix to the working program of the discipline "Name of discipline/ practice". 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	A system of standardized tasks that allows you to automate the procedure measuring the level of knowledge and skills of the student	Test fund assignments
2	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of assimilation of the material, the ability to apply theoretical knowledge in practice.	Task List
3	Individual survey	A control tool that allows you to assess the degree of disclosure of material	List of questions

**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
GC-1, GC -5, GC -7, GC -8, GUC-1,2,4,5,6,7,8,9,11, PC-1,5,6,7,8,10,11,14, 15,16,20,21	Current	<b>Section 1</b> Diabetes mellitus type 1 and 2	Test tasks, list of situational tasks, list of questions
GC-1, GC -5, GC -7, GC -8, GUC-1,2,4,5,6,7,8,9,11, PC-1,5,6,7,8,10,11,14, 15,16,20,21	Current/Mid-term	<b>Section 2</b> Diseases of the thyroid and parathyroid glands	Test tasks, list of situational tasks, list of questions
GC-1, GC -5, GC -7, GC -8, GUC-	Current/Mid-term	<b>Section 3</b> Diseases of the pituitary and adrenal glands	Test tasks, list of situational tasks, list

1,2,4,5,6,7,8,9,11, PC- 1,5,6,7,8,10,11,14, 15,16,20,21			of questions
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\* - not provided for postgraduate programs

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

Test task 1. What is the main pathogenetic mechanism for the development of sugar type 2 diabetes?

1. autoimmune destruction of  $\beta$ -cells
2. insulin resistance
3. monogenic defect
4. obesity

Test task 2. Which method is the most informative in the diagnosis of volume adrenal glands?

1. Ultrasound of the adrenal glands
2. MRI of the adrenal glands
3. CT of the adrenal glands native
4. CT scan of the adrenal glands with contrast

Test task 3. What group of drugs belongs to incretinomimetics?

1. GLP-1 receptor agonists
2. SGLT-2 inhibitors
3. pioglitazones
4. biguanides

Test task 4. Primary hyperparathyroidism is characterized by the following laboratory changes

1. increased PTH, normal blood calcium levels
2. increased PTH, elevated blood calcium levels
3. normal PTH levels, elevated blood calcium levels
4. increased PTH, normal blood calcium levels, vitamin D deficiency

Test task 5. If you suspect which disease is indicated, a small dexamethasone test?

1. hyperaldosteronism
2. hypercortisolism
3. hyperparathyroidism
4. hyperprolactinemia

Test task 6. Which of the following diseases develops amenorrhea?

1. hyperparathyroidism
2. pheochromocytoma
3. hyperprolactinemia
4. diabetes insipidus

Test task 7. What disease is most common in obesity?

1. pheochromocytoma
2. hyperaldosteronism
3. hypothyroidism
4. hypopituitarism

Test task 8. What laboratory indicator can be used to evaluate compensation for diabetes?

1. fasting glucose
2. glycated hemoglobin
3. Postprandial glucose index
4. degree of glucosuria

Test task 9. What disease is characterized by muscle cramps?

1. diabetes
2. thyrotoxicosis
3. hypocorticism
4. hypoparathyroidism

Test task 10. What classification is used to assess malignancy thyroid nodules after TAB?

1. BETHESDA
2. TIRADS
3. ORCID
4. SCOPUS

Test task 11. What endocrine disease is not accompanied by symptomatic hypertension?

1. pheochromocytoma
2. aldosteroma
3. prolactinoma
4. corticosteroma

Test task 12. What are the most informative antibodies in diagnostics diffuse toxic goiter?

1. AT-TPO
2. AT-TP
3. AT-TG
4. AT-rTTG

Test task 13. In what disease is a decrease in specific urine density?

1. diabetes
2. diabetes insipidus
3. monogenic diabetes mellitus
4. steroid diabetes

Test task 14. Which method of insulin administration is the most optimal in patients with type 1 diabetes?

1. basal bolus insulin therapy
2. insulin pump
3. multiple injection mode
4. block and replace mode

Test task 15. What complication of diabetes is related to microangiopathy?

1. retinopathy
2. nephropathy
3. neuropathy
4. all of the above

Test task 16. What disease can a woman develop as a result of massive bleeding during childbirth?

1. idiopathic hyperprolactinemia
2. symptomatic arterial hypertension
3. hypopituitarism
4. hypoparathyroidism

Test task 17. What disease is not characterized by exudative pleurisy?

1. hypothyroidism
2. pheochromocytoma
3. hypocorticism
4. hypoaldosteronism

Test task 18. What electrolyte disturbances are typical for primary adrenal insufficiency?

1. hyperkalemia
2. hypokalemia
3. hypercalcemia
4. hypocalcemia

Test task 19. Which hormonal indicator is the most informative for diagnosis of acromegaly?

1. growth hormone
2. somatostatin
3. calcitonin
4. somatomedin

Test task 20. What changes in the general blood test are typical for subacute thyroiditis?

1. leukocytosis with neutrophilic shift and increased ESR
2. leukocytosis with neutrophilic shift and normal ESR
3. leukopenia
4. ESR increase

4.1. Tasks for the assessment of competence " GC-1, GC -5, GC -7, GC -8, GUC 1,2,4,5,6,7,8,9,11, PC-1,5,6,7,8,10,11,14, 15,16,20,21 ":

**Task 1.** Patient B., 19 years old, went to the doctor with complaints of severe general muscle weakness, drowsiness, poor appetite, dry mouth, severe thirst (drinks up to 4 liters per day), frequent urination, weight loss by 6 kg over the past 2 weeks

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 2.** Patient N., 56 years old, was routinely admitted to the Department of Endocrinology with complaints of fluctuations in blood glucose levels from 3.2 to 23 mmol/l during the day, visual impairment, decreased sensitivity of the toes, recurrent cramps in the feet, increased

with

appetite.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 3.** A 60-year-old patient K. during a routine examination revealed an increase in blood plasma glucose up to 6.7 mmol/l on an empty stomach.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 4.** Patient A., 46 years old, complains of dry mouth, thirst up to 10 liters per day, general

weakness, frequent urination.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 5.** Patient A., 26 years old, was hospitalized in the endocrinology department with complaints of severe general and muscle weakness, decrease in blood pressure to 80/60 mm Hg, weight loss by 9 kg in 2 months, poor appetite, nausea

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 6.** Patient F., 25 years old, was admitted with complaints of absence of menstruation, severe general and muscle weakness, dry mouth, thirst, frequent urination, shortness of breath when walking, weight gain, abdominal enlargement, purple stripes on the abdomen and internal

surface of the thighs, the appearance of a “hump” on the back at the base of the neck, excessive

hair growth on the face and arms, rounding of the face, the appearance of a blush on the cheeks,

subcutaneous hematomas on the anterior surface of the legs, swelling of the legs, increased blood pressure up to 150/100 mm Hg. st

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 7.** Patient V., aged 46, consulted an endocrinologist with complaints of general weakness,

edema on the face and lower extremities, drowsiness, and overweight.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 8.** Patient K., 53 years old, consulted an endocrinologist with complaints of palpitations, weight loss (lost 13 kg in 2 months), tremors in her hands, tearfulness, irritability, insomnia, blurred vision, a feeling of sand in the eyes, decreased performance.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 9.** Patient K., 27 years old, was admitted with complaints of frequent headaches, enlargement of facial features, an increase in the size of the hands and feet, and menstrual irregularities.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

**Task 10.** Patient O., aged 28, applied to a gynecologist with complaints of menstrual irregularities for 1 year, decreased libido, weight gain by 10 kg over 2 years.

- Suggest the most likely diagnosis.
- Draw up and justify a plan for examining the patient.
- Give treatment.

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

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

5.1 The list of control tasks and other materials necessary for the assessment of knowledge, skills and work experience

5.1.1. Questions for the discipline exam (*an exam is not provided*)

#### 5.1.2. Questions for the credit in the discipline

Question	Competence code (according to the WPD)
1. Classification of diabetes. Description of options.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
2. Pituitary insufficiency. Causes, clinical, laboratory, instrumental diagnostics. Patient management tactics.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
3. Volumetric formations of the pituitary gland. Classification, clinical manifestations, diagnosis and treatment.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
4. Volumetric formations of the adrenal glands. Classification, clinical manifestations, diagnosis and treatment.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
5. Diseases of the parathyroid glands. Classification, clinical manifestations, diagnosis and treatment.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
6. Dysfunction of the thyroid gland. Classification, clinical manifestations, diagnosis and treatment.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
7. Principles of treatment of type 1 diabetes	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
8. Principles of treatment of type 2 diabetes	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
9. Endocrine diseases associated with the development of symptomatic arterial hypertension.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21
10. Inflammatory diseases of the thyroid gland.	GC-1,GC-5, GC-7, GC-8,GUC-1,2,4,5,6,7,8,9,11,PC-1,5,6,7,8,10,11,14, 15,16,20,21

### 6. Criteria for evaluating learning outcomes

For the credit (example)

Learning outcomes	Evaluation criteria	
	Not passed	Passed

<b>Completeness of knowledge</b>	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
<b>Availability of skills</b>	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.
<b>Availability of skills (possession of experience)</b>	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.
<b>Motivation (personal attitude)</b>	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.
<b>Characteristics of competence formation*</b>	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.
<b>The level of competence formation*</b>	Low	Medium/High

\* - not provided for postgraduate programs

*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):

Korneva K.G., PhD, assistant professor of the department of endocrinology and internal medicine