

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of Pathology and Forensic Medicine Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"		63-11-2025 Page 1of 8

CONTROL AND MEASURING TOOL

Test tasks for midterm control No.2

Discipline: "Urogenital system in pathology"

Discipline code: USP 3222

Name and code of the EP: 6B 10115 "Medicine"

Amount of study hours/credits: 30 hours/ 1 credit

Course and semester of study: 3rd year, 6th semester

Shymkent, 2025 year

ONTÜSTIK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of Pathology and Forensic Medicine Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"	
63-11-2025 Page 2of 8	

Compiled by: Berdalieva G.B.

<question> The patient complains of edema of the shins, headaches. Two weeks ago, an odontogenic gum abscess was opened. Objectively: the lungs and heart are normal. Blood pressure is 140/100 mm Hg. In the blood: leukocytes - 7.8 thousand, ESR - 22 mm / h. Urine analysis: specific gravity - 1018, protein - 1.72 g / l, leukocytes - 10-12 in the field of vision, erythrocytes - 35-40 in the field of vision, hyaline cylinders 0-1 in the field of vision. The leading pathogenetic factor of nephrotic edema in this case is:

- <variant> hypoproteinemia
- <variant> increased permeability of the vascular wall
- <variant> hyperproteinemia
- <variant> obstruction of lymph drainage
- <variant> decrease in hydrostatic pressure of blood

<question> The patient is bothered by headaches, thirst, nausea, vomiting, nosebleeds, weakness, poor appetite. Has been ill for 10 years. Objectively: pale, there are traces of scratching on the skin, the percussion symptom is positive on both sides. BP - 180/100 mm Hg. HR - 100 beats / min. In the blood: Hb - 96 g / l, erythrocytes - $2.8 \cdot 10^{12} / l$, leukocytes - $8.2 \cdot 10^9 / l$, ESR - 35 mm / h, urea - 16 mmol / l, creatinine - 0.250 mmol / l. Urine analysis: relative density - 1005, protein - 4.5 g / l, leukocytes - 8-12 in the field of vision, erythrocytes - 20-25 in the field of vision. The development of osteoporosis in chronic renal failure is facilitated by:

- <variant> vitamin D metabolism disorder
- <variant> hypercalcemia
- <variant> hypoparathyroidism
- <variant> primary hyperparathyroidism
- <variant> hyperkalemia

<question> The patient was sleepy during the day. He was vomiting, and his mouth smelled of urine. There was a "uremic pattern" on the skin. The urine was light yellow, and its relative density was reduced. The following method is used to reduce the level of toxic metabolic products in the blood in uremia:

- <variant> hemodialysis
- <variant> blood transfusion
- <variant> antiviral therapy
- <variant> antibacterial therapy
- <variant> introduction of hyperosomolar solutions

<question> A patient in the oliguric period of acute renal failure may experience cardiac arrest. What is the cause of this:

- <variant> hyperkalemia
- <variant> hypernatremia
- <variant> hyperhydration
- <variant> hypocalcemia
- <variant> hypophosphatemia

<question> The ratio of nocturnal diuresis to daytime diuresis in a patient with chronic renal failure is 1:1. What type of kidney pathology has developed in the patient:

- <variant> nocturia
- <variant> oliguria
- <variant> polyuria
- <variant> hematuria
- <variant> glycosuria

<question> The patient develops fever, nausea, pain in the right lumbar region, myalgia and arthralgia. During examination, Pasternatsky's symptom is positive. Urine reaction is alkaline, leukocyturia is observed. In this case, the etiotropic treatment is considered:

- <variant> antibiotic therapy
- <variant> herbal medicine
- <variant> antipyretic therapy
- <variant> detoxification therapy
- <variant> anti-inflammatory therapy

<question> The patient suffers from pyelonephritis. Severe headaches, itchy skin, and pain in the stomach area have appeared. Petechial rashes are observed on the skin and chest of the arms, and white scales are on the hair roots. The smell of ammonia comes from the mouth. Pericardial friction rub and noisy Kussmaul breathing are noted. How many nephrons are functioning at this stage of CRF:

- <variant> less than 10% of nephrons
- <variant> 90% nephrons
- <variant> 70% nephrons

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	Department of Pathology and Forensic Medicine	63-11-2025 Page 3of 8
Department of Pathology and Forensic Medicine	Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"	

<variant> 50% nephrons

<variant> 30% nephrons

<question> During the operation, the patient was transfused with blood with an inappropriate blood group. The patient's condition is serious, he lost consciousness. The blood test revealed: anemia, hyperazotemia due to an increase in residual nitrogen, urea, creatinine. Daily diuresis is 200 ml, the relative density of urine is 1.009-1.012. What type of urinary system dysfunction has developed in the patient:

<variant> acute renal failure

<variant> nephrotic syndrome

<variant> nephritic syndrome

<variant> urinary syndrome

<variant> chronic renal failure

<question> A patient with acute renal failure has depressed consciousness, hypotension, and hyporeflexia. Daily diuresis is 3.8 liters, and the relative density of urine is 1.007. This stage of ARF is characterized by:

<variant> hypokalemia

<variant> hypervolemia

<variant> residual nitrogen tends to increase

<variant> hyperhydration of the body

<variant> oliguria

<question> On the 7th day after the development of acute renal failure, the relative density of the patient's urine according to the Zimnitsky test fluctuated to 1.010–1.012. These changes indicate a violation of ...:

<variant> renal concentration function

<variant> secretory function of the kidneys

<variant> excretory function of the kidneys

<variant> filtration function of the kidneys

<variant> renal reabsorption function

<question> The patient was taken to the hospital from the scene of the accident. The chest and abdomen were severely injured. Conscious. Blood pressure was 70/30 mm Hg. Daily diuresis was 30 ml, the relative density of urine fluctuated within 1.010–1.012. What quantitative and qualitative changes in urine developed in the patient:

<variant> anuria, isosthenuria

<variant> anuria, proteinuria

<variant> oliguria, hypersthenuria

<variant> oliguria, hyposthenuria

<variant> oliguria, proteinuria

<question> Increased permeability of the basement membrane of glomerular capillaries in chronic glomerulonephritis, the transition of negative charge to positive and catabolic processes in the renal parenchyma lead to:

<variant> proteinuria

<variant> oliguria

<variant> hematuria

<variant> nocturia

<variant> leukocyturia

<question> The manifestations of this syndrome are considered to be high proteinuria, anemia, hypoalbuminemia, dysproteinemia, hyperlipidemia, generalized edema, increased relative density of urine, lipiduria, formation of wax-like casts in the urine:

<variant> nephrotic syndrome

<variant> nocturic syndrome

<variant> pollakiuric syndrome

<variant> leukocyturia

<variant> nephritic syndrome

<question> The patient had been suffering from diffuse chronic glomerulonephritis for 7 years. Heart pain, palpitations, and severe edema appeared. Daily diuresis was 1100 ml, the relative density of urine was 1.042, and granular and waxy cylinders were found. Hypoproteinemia, hyperlipidemia, and hypernatremia were detected in the blood. The patient's symptoms were characterized by:

<variant> nephrotic syndrome

<variant> pyelonephritis

<variant> renal amyloidosis

<variant> nocturic syndrome

<variant> nephritic syndrome

<question> Two weeks after acute tonsillitis, the patient developed generalized edema on his body. General urine analysis: daily diuresis - 400 ml, relative density of urine - 1.020, protein - 1.8 g / l. When examining the sediment in the urine under a

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	SOUTH KAZAKHISTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»	63-11-2025 Page 4of 8
Department of Pathology and Forensic Medicine Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"		

microscope, the following were found in the field of vision: leukocytes - 2-4, erythrocytes - 25-28, hyaline cylinders - 0-1.

These symptoms are characterized by:

- <variant> oliguria, proteinuria, hematuria
- <variant> oliguria, leukocyturia, hematuria
- <variant> oliguria, hyposthenuria, proteinuria
- <variant> oliguria, leukocyturia, cylindruria
- <variant> anuria, hypersthenuria, hematuria

<question> Ten days after the vaccinations, the patient developed weakness, facial swelling, and dizziness. Blood pressure was 150/95 mm Hg. Diuresis was 750 ml, the relative density of urine was 1.028, and protein was 1.6 g/l. Microscopy of urine sediment revealed altered erythrocytes - 30-40 in the field of vision, leukocytes - 6-8 in the field of vision, hyaline and erythrocyte casts. The above clinical and laboratory signs are characteristic of one of the following conditions:

- <variant> acute glomerulonephritis
- <variant> acute cystitis
- <variant> renal amyloidosis
- <variant> lipoid nephrosis
- <variant> acute pyelonephritis

<question> Ten days after vaccination, the patient developed weakness, facial swelling, and dizziness. Blood pressure was 150/95 mm Hg. Diuresis was 350 ml, the relative density of urine was 1.028, and protein was 1.6 g/l of urine. Microscopy of urine sediment revealed altered erythrocytes - 30-40 in the field of vision, leukocytes - 6-8 in the field of vision, hyaline and erythrocyte casts. These symptoms are characterized by:

- <variant> oliguria, proteinuria, hematuria
- <variant> oliguria, leukocyturia, hematuria
- <variant> oliguria, hyposthenuria, proteinuria
- <variant> oliguria, leukocyturia, cylindruria
- <variant> anuria, hypersthenuria, hematuria

<question> During the operation, the patient was transfused with blood of an incompatible blood group. The patient's condition is serious, he lost consciousness. The blood test revealed: anemia, hyperazotemia due to an increase in residual nitrogen, urea, creatinine. Daily diuresis is 200 ml, the relative density of urine is 1.009-1.012. What type of urinary system dysfunction has developed in the patient:

- <variant> acute renal failure
- <variant> nephrotic syndrome
- <variant> nephritic syndrome
- <variant> leukocyturic syndrome
- <variant> chronic renal failure

<question> The experiment revealed that the final concentration of urine occurs in the collecting tubules passing through the renal medulla. Water reabsorption in the collecting tubules is regulated primarily by a hormone that, by interacting with V2 receptors, promotes the incorporation of water channels into the apical and basal membranes of the epithelial cells of the collecting tubules. The mechanism of action of which hormone is described:

- <variant> vasopressin
- <variant> insulin
- <variant> glucagon
- <variant> cortisol
- <variant> somatotropin

<question> A patient with high blood pressure has a narrowing of one of the renal arteries. What substance is released in the kidney when renal blood flow is reduced:

- <variant> renin
- <variant> angiotensin I
- <variant> angiotensin II
- <variant> aldosterone
- <variant> cortisol

<question> The group of proximal tubulopathies includes:

- <variant> phosphaturia
- <variant> diabetes insipidus
- <variant> pseudohypoaldosteronism
- <variant> distal renal tubulopathy
- <variant> Tony-Debreu-Fanconi syndrome

<question> The group of proximal tubulopathies includes:

- <variant> renal glucosuria
- <variant> diabetes insipidus
- <variant> pseudohypoaldosteronism

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	Department of Pathology and Forensic Medicine	63-11-2025 Page 5 of 8
	Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"	

<variant>distal renal tubulopathy

<variant>Tony-Debreu-Fanconi syndrome

<question> This type of tubulopathy is associated with hypophosphatemia, rickets-like changes in bones. It is believed that the mechanism of development of this disease is played by the absence of transport protein and the absence of receptors for binding calcitriol. Define the described condition:

<variant>phosphaturia

<variant>renal glucosuria

<variant> Debreu-Fanconi syndrome

<variant>renal hyperaminoaciduria

<variant>pseudohypoaldosteronism

<question> This type of tubulopathy is characterized by elevated levels of glucose in the urine, but normal or low levels of glucose in the blood. Identify the condition described:

<variant>Debreu-Fanconi syndrome

<variant>diabetes mellitus

<variant>phosphaturia

<variant>renal hyperaminoaciduria

<variant>pseudohypoaldosteronism

<question> Factor that contributes to sodium retention in the kidneys:

<variant>stimulation of RAAS

<variant>elevated atrial natriuretic factor

<variant>increased progesterone

<variant>decreased parathyroid hormone

<variant>increased glucagon

<question> Hormone that promotes sodium retention in the body:

<variant>aldosterone

<variant>thyroxine

<variant>progesterone

<variant>parathyroid hormone

<variant>glucagon

<question> Hormone(s) that promote sodium retention in the body:

<variant>glucocorticoids

<variant>thyroxine

<variant>progesterone

<variant>parathyroid hormone

<variant>glucagon

<question> Hormone that increases the excretion of sodium from the body:

<variant>parathyroid hormone

<variant>insulin

<variant>somatotropic hormone

<variant>estrogens

<variant>glucocorticoids

<question> Hormone that increases the excretion of sodium from the body:

<variant>glucagon

<variant>insulin

<variant>somatotropic hormone

<variant>estrogens

<variant>glucocorticoids

<question> Excessive loss of potassium may be caused by:

<variant> hyperaldosteronism

<variant> low flow rate of tubular fluid

<variant> proximal tubular alkalosis

<variant> increase in lipocaine

<variant> hyperproduction of endorphins

<question> Excessive loss of potassium may be caused by:

<variant> high fluid flow rate in the tubules

<variant> low fluid flow rate in the tubules

<variant> proximal tubular alkalosis

<variant> increase in lipocaine

<variant> hyperproduction of endorphins

<question> Calcium reabsorption is mainly stimulated by:

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHISTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of Pathology and Forensic Medicine		
Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"		63-11-2025 Page 6 of 8

<variant> parathyroid hormone

<variant> insulin

<variant> somatotrophic hormone

<variant> estrogens

<variant> glucocorticoids

<question> Calcium reabsorption is mainly stimulated by:

<variant> thyrocalcitonin

<variant> insulin

<variant> somatotrophic hormone

<variant> estrogens

<variant> glucocorticoids

<question> Of the following, nephrotic syndrome is most characterized by:

<variant> proteinuria

<variant> macrohematuria

<variant> oliguria

<variant> arterial hypertension

<variant> the presence of subendothelial immune complexes

<question> Of the following, nephrotic syndrome is most characterized by:

<variant> gradual start

<variant> macrohematuria

<variant> minor swelling

<variant> arterial hypertension

<variant> the presence of subendothelial immune complexes

<question> Of the following, nephritic syndrome is most characterized by:

<variant> acute onset

<variant> mesangial deposition of immune complexes

<variant> lipiduria

<variant> severe swelling

<variant> significant decrease in blood albumin

<question> Of the following, nephritic syndrome is most characterized by:

<variant> minor swelling

<variant> mesangial deposition of immune complexes

<variant> lipiduria

<variant> severe swelling

<variant> significant decrease in blood albumin

<question> This type of acute renal failure (ARF) is characterized by impaired renal hemodynamics without damage to the renal parenchyma. Determine the described type of ARF:

<variant> prerenal

<variant> renal

<variant> postrenal

<variant> idiopathic

<variant> iatrogenic

<question> This type of acute renal failure (ARF) is associated with damage to the renal tubules. Identify the type of ARF described:

<variant> renal

<variant> prerenal

<variant> postrenal

<variant> idiopathic

<variant> iatrogenic

<question> Causes of prerenal acute renal failure may be:

<variant> blood loss, dehydration

<variant> disseminated intravascular coagulation

<variant> acute tubular necrosis

<variant> nonsteroidal anti-inflammatory drugs

<variant> urinary tract obstruction

<question> Prerenal acute renal failure may be caused by:

<variant> decrease in effective blood flow volume

<variant> disseminated intravascular coagulation

<variant> acute tubular necrosis

<variant> nonsteroidal anti-inflammatory drugs

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»	63-11-2025 Page 7 of 8
Department of Pathology and Forensic Medicine Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"		

<variant > urinary tract obstruction

<question> Acute renal failure may be caused by:

<variant> disseminated intravascular coagulation

<variant> decrease in effective blood flow volume

<variant> blood loss, dehydration

<variant > shock, collapse

<variant > urinary tract obstruction

<question> Acute renal failure may be caused by:

<variant> acute tubular necrosis

<variant> decrease in effective blood flow volume

<variant> blood loss, dehydration

<variant > shock, collapse

<variant > urinary tract obstruction

<question> The cause of postrenal acute renal failure may be:

<variant> urinary tract obstruction

<variant> bacterial toxins

<variant> acute tubular necrosis

<variant > disseminated intravascular coagulation

<variant > acute systemic hypotension

<question> The cause of postrenal acute renal failure may be:

<variant> bladder cancer

<variant> bacterial nephrotoxins

<variant> acute tubular necrosis

<variant > disseminated intravascular coagulation

<variant > acute systemic hypotension

<question> This phase of renal acute renal failure (ARF) lasts from several hours to 1-3 days; there are no signs of renal dysfunction; hemodynamic disturbances predominate. Name the described phase of ARF:

<variant> initial phase

<variant> period of oliguria

<variant> diuresis recovery period

<variant> recovery period

<variant > latent phase

<question> Functional and metabolic disorders in acute renal failure include:

<variant> hyperazotemia

<variant> decrease in serum urea

<variant> normal residual nitrogen content in the blood

<variant > decrease in creatinine in the blood

<variant> normal amino acid levels in blood serum

<question> Functional and metabolic disorders in acute renal failure include:

<variant> elevated serum urea levels

<variant> hypoazotemia

<variant> normal residual nitrogen content in the blood

<variant > decrease in creatinine in the blood

<variant> normal amino acid levels in blood serum

<question> Functional and metabolic disorders in acute renal failure include:

<variant> elevated creatinine in the blood

<variant> decrease in serum urea

<variant> hypoazotemia

<variant> normal residual nitrogen content in the blood

<variant> normal amino acid levels in blood serum

<question> Functional and metabolic disorders in acute renal failure include:

<variant> high serum amino acid levels

<variant> decrease in serum urea

<variant> hypoazotemia

<variant> normal residual nitrogen content in the blood

<variant > decrease in creatinine in the blood

<question> In acute renal failure, the development of peripheral edema and effusion is primarily due to:

<variant> hyperhydration

<variant> hypokalemia

<variant> hypomagnesemia

ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		SOUTH KAZAKHISTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of Pathology and Forensic Medicine Test tasks for midterm control 2 in the discipline "The genitourinary system in pathology"		63-11-2025 Page 8 of 8

<variant > decrease in sodium in the blood

<variant > increased chlorine in the blood

<question> In acute renal failure, the development of pulmonary and cerebral edema is primarily due to:

<variant> hyperhydration

<variant> hypokalemia

<variant> hypomagnesemia

<variant > decrease in sodium in the blood

<variant > increased chlorine in the blood

<question> Chronic renal failure can be caused by:

<variant> chronic glomerulonephritis

<variant> hypovolemic shock

<variant> acute tubular necrosis

<variant > toxic toxins

<variant > acute urinary tract obstruction

<question> Chronic renal failure can be caused by:

<variant> tubulointerstitial nephritis

<variant> hypovolemic shock

<variant> acute tubular necrosis

<variant > toxic shock

<variant > acute urinary tract obstruction

<question> This phase of chronic renal failure (CRF) is characterized by normal plasma creatinine levels and normal glomerular filtration rate, but concentration and dilution tests reveal a decrease in the functional reserve of the kidneys.

Determine the stage being described:

<variant > I A

<variant > II B

<variant> II A

<variant> II B

<variant> III

<question> This phase of renal acute renal failure (ARF) lasts from 6 to 12 months. It is characterized by gradual normalization of the volume of diuresis, tubular epithelial function, inulin clearance and endogenous creatinine. Name the described phase of ARF:

<variant > recovery period

<variant > initial phase

<variant > period of oliguria

<variant > diuresis recovery period

<variant > latent phase

<question> In acute renal failure, arterial hypertension and left ventricular failure are primarily caused by:

<variant > hyperhydration

<variant > hypokalemia

<variant > hypomagnesemia

<variant > decrease in sodium in the blood

<variant > increase in chlorine in the blood

<question> In acute renal failure, cardiac arrest is most often caused by:

<variant > hyperkalemia

<variant > hyperhydration

<variant > hypomagnesemia

<variant > increased sodium in the blood

<variant > increase in chlorine in the blood

<question> In acute renal failure, seizures and hyperparathyroidism are most often caused by:

<variant > hypocalcemia

<variant > hyperhydration

<variant > hypomagnesemia

<variant > hyperkalemia

<variant > increase in chlorine in the blood

Protocol No. 13 from "26" 06 2025

Head of the Department

Sadykova A. Sh.