SPLANCHNOLOGY
THE DIGESTIVE SYSTEM

TASK №1
The oral cavity. The hard and soft palate. The teeth.

1. **The baby was born with cleft palate. Which bones form the bone palate?**
   A. Palatine process of maxilla and perpendicular plate of palatine bone.
   B. Palatine process of maxilla and horizontal plate of palatine bone.
   C. Palatine process of maxilla and body of sphenoid bone.
   D. Alveolar process of maxilla and perpendicular plate of palatine bone.
   E. Body of maxilla and perpendicular plate of palatine bone.

2. **A mother of a newborn complains that during sucking milk outflow through nasal cavity. Which developmental anomaly is it in an evidence of?+**
   A. **Cleft (wolf) palate**
   B. Underdevelopment of the palate
   C. Micrognatia
   D. Unilateral cleft (hare) lip
   E. Bilateral cleft (hare) lip

3. **During examination of the child's oral cavity a pediatrician established presence of inferior medial incisors The child's development is normal. How old is the child?**
   A. 6-7 months
   B. 8-9 months
   C. 13-14 months
   D. 10-12 months
   E. 15-16 months

4. **The patient has the serious toothache, he can't sleep. Which disease of the tooth is this?**
   A. Caries
   B. Pulpitis
   C. Periodontitis
   D. Gingivitis
   E. Paradontitis

5. **The patient has the toothache, which become more serious during chewing. Which disease of the tooth is this?**
   A. Caries
   B. Pulpitis
   C. Periodontitis
   D. Gingivitis
   E. Paradontitis

6. **Mucous membrane, which covers the alveolar processes of maxilla and alveolar part of the mandible is inflamed. Which disease is this?+**
   A. Caries
   B. Pulpitis
   C. Periodontitis
   D. Gingivitis
   E. Paradontitis

7. A 30-year-old patient with a second upper molar pulp inflammation appealed to a doctor with complaints of headache and nose rheum. After examination pulpitis complicated with sinusitis was diagnosed. Which sinus did the infection enter from this tooth root canal?

*A. Maxillary sinus.
B. Frontal sinus.
C. Sphenoidal sinus.
D. Ethmoid cells.
E. Mastoid cells.

TASK №2
The tongue. The salivary glands: topography, structure, and ducts.

1. The person drank the boiling water. The tongue became painful. Which papillae of the tongue are responsible for pain temperature and touch?+

A. Fungiform papillae
B. Vallate papillae
C. **Filiform papillae**
D. Foliate papillae
E. Lingual papillae

2. After drinking the boiling water the person has the disturbance of the taste. Which papillae of the tongue responsible for taste?+

A. **Fungiform, vallate and foliate papillae**
B. Filiform and conical papillae
C. Lingual papillae
D. Sublingual papillae
E. Labial and buccal papillae

3. After a face injury a patient has a hematoma in the cheek area. What salivary glands secretion outflow is blocked by the hematoma?+

A. Buccal.
B. Sublingual.
C. Submandibular.
D. Labial.
E. Parotid.

4. A 35-year-old patient complained of pain and edema in the site of oral cavity floor. After examination the inflammatory process in the site of the excretory duct of submandibular gland was diagnosed. Where does this duct open to?+

A. Plica sumlingualis.
B. Vestibulum oris.
C. Foramen caecum linguae.
D. Caruncula sublingualis.
E. Recessus gingivalis.

TASK №3
The pharynx: topography and structure of the pharynx. The tonsil of the pharynx. The esophagus: topography, structure and function.

1. Children frequently have nasal breathing affection caused by the overgrowth of the pharyngeal mucous membrane lymphoid tissue. Which tonsils excrescence may

cause this?

A. Palatine.
B. Pharyngeal.
C. Lingual.
D. Tubal.
E. All mentioned.

2. **A 12-year-old child complains of pain in the throat. Examination has shown that the cause of this is lymphoid tissue inflammation. Which tonsil is inflamed?**

A. Tubal.
B. Palatine.
C. Pharyngeal.
D. Lingual.
E. All mentioned.

3. **X-ray examination has shown a foreign body in the gullet at T_{IV} level. In what field of gullet constriction did the foreign body stop?+**

A. Bronchial.
B. Pharyngeal.
C. Aortic.
D. Diaphragmatic.
E. Cardiac.

4. **A mother of a newborn complains of her baby's constant belhing with undigested milk. Which developmental anomaly is it in an evidence of?**

A. Esophageal atresia
B. Faux lupinum
C. Labium leporum
D. Anal atresia
E. Esophageal fistula

5. **Children often have heavy nasal breathing resulting from excessive development of lymphoid tissue of pharyngeal mucous membrane. What tonsils growth may cause this effect?**

A. Tonsilla palatine
B. All above mentioned tonsils
C. Tonsilla tubaria
D. Tonsilla phraryngea
E. Tonsilla lingualis

Children often have heavy nasal breathing resulting from excessive development of lymphoid tissue of pharyngeal mucous membrane. What tonsils growth may cause this effect?

A Tonsilla pharyngea
B Tonsilla palatina
C Tonsilla lingualis
D Tonsilla tubaria
E All above mentioned tonsils

TASK №4

Subdivision of the abdomen into regions. The stomach: topography, structure and function.

1. **During the X-ray examination ofa 30-year-old patient in vertical position a doctor**

detected the presence of air in the stomach. What part of the stomach is it in?+

A. In the body.
B. At the fundus.
C. In the cardial.
D. In the pyloric.
E. In the area of the lesser curvature.

2. During a duodenal intubation the probe does not pass from the stomach into the duodendum. What part of the stomach is an obstacle (tumor) in?

A. In the body area.
B. In the cardial part.
C. In the fundus area.
D. In the pyloric part.
E. In the area of the lesser curvature.

3. During a duodenal intubation the probe does not pass to the stomach from the gullet. What part of the stomach is an obstacle (tumor) in?

A. In the cardial.
B. In the pyloric.
C. In the fundus area.
D. In the body area.
E. In the greater curvature area.

4. A patient has pain in epigastric region. What organs disease can it indicate?

A. Stomach, duodenum.
B. Small intestine, liver.
C. Spleen, kidney.
D. Colon, gallbladder.
E. Fundus of stomach, transverse colon.

5. During histological examinations of he stomach it was found out that glands contained very small amount of parietal cells or they were totally absent. Mucose membrane of what part of the stomach was studied?

A. Body of stomach
B. Pyloric part
C. Cardia
D. Fundus of stomach
E. Lesser curvature

TASK №5

The small and large intestines: topography, structure and function.

1. During fibrogastroduodenoscopy a doctor has to examine the major duodenal papilla. What anatomic formation can serve as a landmark for its revealing?

A. Duodenal glands.
B. Circular folds of the duodenum.
C. Duodenal cap.
D. Longitudinal fold of the duodenum.
E. Hepatoduodenal ligament.

2. A 50-year-old patient was hospitalized with gall-bladder inflammation suspected. He was prescribed fibrogastroscopy of digestive tract with obligatory examination of the major duodenal papilla. In what part of the duodendum is the papilla located?

A. Pars ascendens.
B. Pars descendens.

C. Pars horizontalis.
D.Pars superior.
E. Ampulla duodeni.

3. **A 7-year-old girl comes to the emergency department with severe diarrhea. Tests show that the diarrhea is due to decreased capacity of normal absorption in one of her organs. Which of the following organs is involved?**
   A. Stomach
   B. Small intestine
   C. Large intestine
   D. Liver
   E. Pancreas

The answer is C. The large intestine absorbs water, salts, and electrolytes. Hence, the patient's diarrhea stems from an absorption problem. The stomach mixes food with mucus and gastric juice, which contains hydrochloric acid and enzymes, and forms chyme. The small intestine receives chyme, bile, and pancreatic juice; digestion and absorption of nutrients takes place in this organ. The liver produces bile, whereas the pancreas secretes pancreatic juice, which contains digestive enzymes and which releases hormones, insulin, and glucagons.

4. **Obturative jaundice developed in a 60-years old patient because of malignant tumor of the big papillary of the duodenum. Lumen of what anatomical structure is squeezed with tumor?**
   A. Cystic duct
   B. Right hepatic duct
   C. Common hepatic duct
   D. Left hepatic duct
   E. Hepatopancreatic ampula

5. **During the endoscopy the inflammation of a major papilla of the duodenum and the disturbance of the bile secretion were found. In witch part of duodenum were the problems found?**
   A. Bulb
   B. Ascendant part
   C. Descendent part
   D. Upper horizontal part
   E. Lower horizontal part

6. **A patient was admitted to the surgical department with suspected inflammation of Meckels diverticulum. What part of bowels should be examined in order to discover the diverticulum in course of operation?** +
   A. Ileum
   B. Jejunum
   C. Colon ascendens
   D. Caecum
   E. Duodenum

TASK №5
The liver, gallbladder, pancreas: topography, structure and function.

1. **Dimensioning of liver gave an opportunity to establish that its superior border along the right middle clavicular line is on the forth intercostal space level; its inferior border projects from the coastal margin by 4 cm. Evaluate the liver size.+**

A. Enlarged liver - its lower border dislocated down.
B. Reduced liver - its lower border dislocated down.
C. Reduced liver - its lover border dislocated upwards.
D. Enlarged liver - its upper border dislocated upwards.
E. Liver dimensions are normal.

2. A 60-year-old patient's malignant tumor of the major duodenal papilla caused obstructive jaundice. The lumen of what anatomic structure is squeezed by tumor?+
A. Cystic duct.
B. Hepaticopancreatic ampulla.
C. Common hepatic duct.
D. Right hepatic duct.
E. Left hepatic duct.

3. A patient with cholelithiasis fell ill with mechanic jaundice. Examination revealed that the stone was in the common bile duct. What bile-excreting duct makes up the obturated duct? (2008)+
A. Ductus hepaticus dexter et ductus cysticus
B. Ductus hepaticus communis et ductus choledochus
C. Ductus hepaticus dexter et sinister
D. Ductus hepaticus sinister et ductus cysticus
E. Ductus hepaticus communis et ductus cysticus

4. A patient has disturbed digestion of proteins, fats and carbohydrates. It is most likely to be caused by reduced secretion of the following digestive juice: (2008)+

A. Intestinal
B. Pancreatic
C. Gastric
D. Bile
E. Saliva

TASK №6

The peritoneum: the structure and function. The derivatives of the peritoneum. The peritoneal cavity retroperitoneal space. The storeys of the abdominal cavity.

1. A 45-year-old patient was hospitalized to a surgical department with complaints of sudden acute pain in epigastric region. After the examination the perforated ulcer of the posterior wall of the stomach was diagnosed. Where did stomach contents issue at the moment of perforation?+
A. Into the omental bursa.
B. Into the hepatic bursa.
C. Into the pregastric bursa.
D. Into the left mesenteric sinus.
E. Into the right mesenteric sinus.

2. Necrotic form of acute pancreatitis of a patient is diagnosed. Into what peritoneal formation does serous fluid exudation spread?+
A. Into the omental bursa.
B. Into the hepatic bursa.

C. Into the pregastric bursa.
D. Into the left paracolic gutter.
E. Into the right paracolic gutter.

3. A woman was hospitalized with abdominal emergencies symptoms. After the examination fallopian tube rupture accompanying abdominal gestation is suspected. Which pelvis anatomical formation is to be punctured to confirm the diagnosis?
A. Rectouterine pouch.
B. Vesicouterine pouch.
C. Rectovesical pouch.
D. Ischiorectal fossa.
E. Vaginal process of peritoneum.

4. During examination of the patient the presence of suppurative exudation in the straight rectouterine pouch was suspected. Through what anatomic formation is it better to puncture the pouch?+
A. Posterior vaginal fornix.
B. Anterior vaginal fornix.
C. Rectal ampulla.
D. Pelvic diaphragm.
E. Anterior vaginal wall.

5. A 40-year-old man had a ureteral calculus instrumentally removed, which was complicated by rupture of the ureter wall in the abdominal part. Where will urine get through the rupture in the ureter wall?
A. Omental bursa.
B. Hepatic bursa.
C. Peritoneal cavity.
D. Retroperitoneal space.
E. Vertebral canal.

6. In case of a penetrating wound of the anterior abdominal wall the wound tract went above the lesser curvature of stomach. What peritoneum formation is most likely to be injured. (2007)+
A. Lig.hepatoduodenale
B. Lig.hepatogastricum
C. Lig.hepatorenale
D. Lig.gastocolicum
E. Lig.triangulare sinistrum

7. A patient with a stab wound of the anterior stomach wall is in surgical care. What formation of abdominal cavity did the stomach contents get into? (2007)+

A. Hepatic bursa
B. Pregastriac bursa
C. Right mesenteric sinus
D. Left mesenteric sinus
E. Omental bursa

THE RESPIRATORY SYSTEM

TASK №7

The nasal cavity and paranasal sinuses. The larynx.

1. **A patient complains of headache and heavy breathing. X-ray examination confirmed the diagnosis - frontitis (inflammation of the frontal sinus). In what nasal meatus may purulent discharge be observed during the examination of the nasal cavity?+**

A. Common.
B. Superior.
C. Inferior.
D. Middle.
E. Above the superior nasal concha.

2. **During examination an otolaryngologist diagnosed the inflammation of the maxillary sinus. In what nasal meatus did the rhinoscopy show pus?+**

A. Middle.
B. Superior.
C. Inferior.
D. Common.
E. Supreme.

3. **A patient has got a complication after rhinitis. X-ray examination showed pus accumulation in the sphenoid sinus on the left. To what nasal meatus does the pus release?+**

A. Sphenoethmoidal recess.
B. Inferior nasal meatus.
C. Superior nasal meatus.
D. Common nasal meatus.
E. Middle nasal meatus.

4. **A patient has a tumor in the superior nasal meatus region. Which function can be affected?**+

A. Of smell.
B. Of salivation.
C. Of taste.
D. Of hearing.
E. Of swallowing.

5. **A 25-year-old patient appealed to a doctor with complains of coryza and headache lasting for 4 days. Examination diagnosed frontitis. Through which nasal meatus did the infection get into the frontal sinus?**+

A. Common.
B. Superior.
C. Inferior.
D. Middle.
E. Nasopharyngeal.

6. **35-year-old patient appealed to a doctor with complains of severe coryza and olfaction loss during a week. Examination of the nasal cavity has shown a lot of mucus covering the mucous tunic and blocking olfactory receptors. Name the place of the nasal cavity where these receptors are located.**

A. Superior nasal concha.
B. Middle nasal concha.
C. Inferior nasal concha.
D. Common nasal meatus.
E. Vestibule of nose.

7. Examination of the nasal cavity revealed deviation of the posterior part of the nasal septum. Which bone is affected?+

A. Lateral plate of pterygoid process of sphenoid bone
B. Perpendicular plate of ethmoid bone
C. Vomer
D. Medial plate of pterygoid process of sphenoid bone
E. Perpendicular plate of palatine bone

8. A 18-year old patient came to the outpatient department with the complaints of bleeding trauma I the vestibule of the nose. On examination: the mechanical injure of the mucous layer of the vestibule without continuation in the nasal cavity proper. What is the boundary between the vestibule and nasal cavity proper?

A. Nasal septa
B. Choanes
C. Nasal roller
D. Nostrils
E. Nasal limen

9. A 35-year old patient applied to a doctor with complaints about having intense retinitis and loose of sense of smell for a week. Objectively: nasal cavity contains a lot of mucus that covers mucous membrane and block olfactory receptors. In what part of nasal cavity are these receptors situated? (2008)

A. Common nasal meatus
B. Medial nasal concha
C. Vestibule of nose
D. Inferior nasal concha
E. **Superior nasal concha**

10. Reontgenological examination of the patient revealed a deformity of the inferior wall of the right eye socket. Which paranasal sinus was most probably damaged?

A. **Right maxillary sinus**
B. Sphenoid sinus
C. Right ethmoidal cells
D. Frontal sinus
E. Cavernous sinus

11. During woodwork a worker accidentally inhaled a bulb nearly 0.5 cm in diameter which caused strong cough. Which part of respiratory tracts felt irritating influence?

A. Trachea.
B. Larynx under the vocal ligaments.
C. Larynx above the vocal ligaments.
D. Right principal bronchus.
E. Left principal bronchus.

TASK №8
The trachea and principal bronchi.

1. A patient with external respiration dysfunctions needs tracheotomy. At the level of which cartilaginous tracheal retractions is the isthmus of thyroid localized the most often?

A. I - II.
B. III - IV.
C. II - IV.
D. IV - V.
E. V - VI.

2. **A 10-year-old patient was admitted to a clinic. The day before he had swallowed a nut after what continuous cough and signs of heavy breathing appeared. Phonation function wasn't affected. Where may the foreign body localize?+**
   A. In the trachea.
   B. In the left principal bronchus.
   C. In the right principal bronchus.
   D. In the vestibular fissure.
   E. In the fissure of glottis.

3. **A child inhaled a button. Where do foreign bodies get most often?**
   A. Right principal bronchus.
   B. Left principal bronchus.
   C. Trachea.
   D. Larynx.
   E. Esophagus.

TASK №9
The lungs: bronchial tree. The segment structure of the lung.

1. **During the right-side lobectomya surgeon reached the right lung root in order to pick out and process its components. Point the order of lung root components from top to bottom.+**
   A. Bronchus, pulmonary artery, pulmonary veins.
   B. Pulmonary artery, bronchus, pulmonary veins.
   C. Pulmonary vein, pulmonary artery, bronchus.
   D. Bronchus, pulmonary artery, phrenic nerve.
   E. Phrenic nerve, bronchus, pulmonary artery and vein.

2. **A patient has a left-side pulmonectomy performed because of the carcinoma of lung. After the dissection of the mediastinal pleura pulmonary veins must be ligated first of all to decrease the possibility of malignant cells metastasis. To avoid mistakes a surgeon must know the order of the root anatomic structures of the left lung from top to bottom** (Vinnitsa).
   A. Bronchus, pulmonary artery, pulmonary veins.
   B. Pulmonary artery, bronchus, pulmonary veins.
   C. Pulmonary artery, pulmonary veins, bronchus.
   D. Pulmonary veins, pulmonary artery, bronchus.
   E. Bronchus, pulmonary artery, nerves.

3. **A 37-year-old patient has suffered from pulmonary tuberculosis since childhood. Amputation of the superior lobe of the right lung has been performed. Which segments have been amputated?**
   A. Apical, posterior and anterior.
   B. Superior and anterior.
   C. Medial basal and lateral basal.
   D. Superior lingular and inferior lingular.
   E. Lateral and medial.

4. During the examination of a 67-year-old patient a roentgenogram shows a tumor of the superior lobe of the left lung. What segments are located in this lobe?

A. Medial, lateral.
B. Superior and anterior, superior lingular, inferior lingular.
C. Apical , anterior and posterior.
D. Apical, anterior.
E. Apical-posterior, anterior, superior lingular, inferior lingular.

5. Right-side bronchopneumonia of the medial and lateral segments of a patient was diagnosed. To which lobe of lungs do they refer?

A. Superior right.
B. Middle.
C. Inferior right.
D. Superior left.
E. Inferior left

6. A 50-year-old patient with carcinoma of lung had a right-side lobectomy (ablation of the superior lobe of the lung) performed. How many segments were ablated during the operation?+

A. Four.
B. Three.
C. Five.
D. Two.
E. None.

7. A 75-year-old patient has been suffering from lung cancer located near the cardiac notch, a deep indentation on the lung. Which of the following lobes is most ikely to be excised? +

A. Superior lobe of the right lung.
B. Middle lobe of the right lung.
C. Inferior lobe of the right lung.
D. Superior lobe of the left lung.
E. Inferior lobe of the left lung.

8. A 53-year-old man with a known history of emphysema is examined in the emergency department. Laboratory findings along with examination indicate that the patient is unable to exchange oxygen in the air and carbon dioxide in the blood. This exchange occurs in which portion of the respiratory system? +

A. Bronchi
B. Alveolar (air) sac
C. Nasal cavity
D. Larynx
E. Trachea

The answer is B. The respiratory portion of the lung contains the alveolar (air) sacs or alveoli, which are surrounded by networks of pulmonary capillaries. Oxygen and carbon dioxide ex-change occurs across the thin walls of the alveoli and blood capillaries with the aid of the di-aphragm and thoracic cage. The nasal cavity, larynx, trachea, and bronchi are air-conducting portions.

9. A patient was admitted to a hospital with a knife wound of the thorax on the right and pneumothorax. Percussion has shown that the inferior right lung border rose to the III rib level along the right middle clavicular line. Where is it located normally?

A. VI rib.

B. VII rib.
C. VIII rib.
D. IX rib.
E. V rib.

10. **In the cpecimen of one of the part of respiratory system a tubular organ was found. It was low epithelium, well developed muscular tunic, glands and cartilages are absent. Name this organ.** (2006)
    A. Major bronchi
    B. Trachea
    C. Minor bronchi
    D. Larynx
    E. Medial bronchi

11. **A patient with thrombophlebitis of lower extremities had got chest pain, blood spitting, growing respiratory failure that caused his death. Autopsy revealed multiply pulmonary**
    A. Pulmonary artery thrombosis
    B. Bronchial artery embolism
    C. Pulmonary venous thrombosis
    D. Pulmonary artery embolism
    E. Bronchial artery thrombosis

12. **A thoracic surgeon removed the right middle lobar (secondary) bronchus along with lung tissue from a 57-year-old heavy smoker with lung cancer. Which of the following bronchopulmonary segments must contain cancerous tissues?**
    (A)Medial and lateral
    (B)Anterior and posterior
    (C)Anterior basal and medial basal
    (D)Anterior basal and posterior basal
    (E)Lateral basal and posterior basal

The answer is A. The right middle lobar (secondary) bronchus leads to the medial and lateral bronchopulmonary segments. The right superior lobar bronchus divides into the superior, posterior, and anterior segmental (tertiary) bronchi. The right inferior lobar bronchus has the anterior, lateral, posterior, and anterior segmental bronchi.

13. **The bronchogram of a 45-year-old female smoker shows the presence of a tumor in the eparterial bronchus. Which airway is most likely blocked?**
    (A)Left superior bronchus
    (B)Left inferior bronchus
    (C)Right superior bronchus
    (D)Right middle bronchus
    (E) Right inferior bronchus

The answer is C. The eparterial bronchus is the right superior lobar (secondary) bronchus; all of the other bronchi are hyparterial bronchi.

TASK №10
The pleural sacs. The boundary of the lungs and pleural sac. The mediastinum.

1. **A patient was admitted to a hospital with a knife wound of the thorax on the right**

and pneumothorax. Percussion has shown that the inferior right lung border rose to the III rib level along the right middle clavicular line. Where is it located normally?

A. VI rib.
B. VII rib.
C. VIII rib.
D. IX rib.
E. V rib.
A. Common.

2. A 45-year-old patient was hospitalized with complaints of high temperature, pain during respiration, dyspnea, and cough. Examination and radiodiagnostics diagnosed pleurisy. For exudation evacuation pleurocentesis was prescribed. In what place of the pleural cavity is the largest quantity of exudation?+

A. Under the root of lungs.
B. In the phrenico-mediastinal sinus.
C. In the costomediastinal sinus.
D. Under the cervical pleura.
*** E. In the costodiaphragmatic recess.**

3. A 44-year old woman was admitted to the therapeutic department because of right side pleuritis. The examination confirmed the presence of liquid in the pleural cavity. What sinus of the pleura will have the biggest accumulation of the serosity?

A. Left mediastinodiaphragmatic
B. Right mediastinodiaphragmatic
C. Right costomediastinal
D. Left costomediastinal
E. Right costodiaphragmatic

THE UROGENITAL ORGANS

TASK №11

The kidney: the topography, structute and function of the kidney.

1. After a significant weight loss a 70-year-old man has dull pain in the loin. The diagnose is a floating kidney. In which part of the kidney fixative apparatus have the changes taken place? +

A. Capsula adiposa.
B. Capsula fibrosa.
D. Lig. hepatorenalis.
C. Fascia renalis
E. M. quadratus lumborum.

2. Urography has shown calculi inthe macroscopic parts of the kidney urinary tracts. It was detected that they are located in:

*** A. Minor and major renal calices, renal pelvis.**
B. Gathering tubules, papillary ducts, minor renal calices.
C. Straight tubules, minor and major renal calices.
D. Papillary ducts, major renal calices, renal pelvis.
E. Papillary ducts, minor renal calices, straight tubules.

3. Ultrasonic examination of a young man of 19 has shown nephroptosis. At which vertebrae level is the kidneys' normal position?+

*** A. Th $_{XI}$ – L $_{III}$**

B. Th $_{1X}$ –Th $_{X}$.
C. L $_{IV}$ – L$_{V}$.
D. Th $_{XII}$ – L$_{I}$
E. Th$_{1X}$ – Th$_{XII}$.

4. A 16-year-old girl with urinary diseases comes to a local hospital. Her urologist's examination and laboratory test results reveal that she has difficulty in removing wastes from the blood and in producing urine. Which of the following organs may have abnormal functions?+

A. Ureter
B. Spleen
C. Urethra
D. Bladder
*** E. Kidney**

The answer is E. The urinary system includes the kidneys, which remove wastes from the blood and produce the urine; the ureters, which carries urine; the urinary bladder, which stores unne; and the urethra, which conveys urine from the bladder to the exterior of the body. The speen filters blood to remove particulate matter and cellular residue, stores red blood cells, and produces lymphocytes. Because the patient is not producing urine properly, the malfunctioning aigans are the kidneys.

5. The electronic micro photo of kidney fragment has exposed afferent glomerular arteriole, which has giant cells under its endothelium, containing secretory granules. +

A. Smoothmuscular
B. Interstitial
C. Mesanglial
D. Juxtavascular
E. Juxtaglomerular

TASK №12
The ureter, urinary bladder, urethra.

1. A woman of 58 has undergone complete hysterectomy and salpingooophorectomy, after which urinary excretions stopped. Cystoscopy has shown that the bladder does not contain urine, urine does not flow from the openings of ureters. Which part of the urinary excretion system is damaged?

A. Urethra.
*** B. Ureter.**
C. Vesica urinaria.
D. Pelvis renalis.
E. Ren.

2. A 40-year-old man had a ureteral calculus instrumentally removed, which was complicated by rupture of the ureter wall in the abdominal part. Where will urine get through the rupture in the ureter wall?+

A. Omental bursa.
B. Hepatic bursa.
C. Peritoneal cavity.
D. Retroperitoneal space.
E. Vertebral canal.

3. During a urinary bladder catheterization an abrupt catheter introduction caused bleeding as a result of thetrauma of the urethral mucous tunic in the external sphincter muscle area. In which urethral area should the doctor be careful and feel the resistance of soft tissues as the catheter passes through?+

*** A. In pars membranacea urethrae.**
B. In fossa navicularis urethrae area.
C. In bulbus urethrae.
D. In pars spongiosa urethrae.
E. In past prostatica urethrae.

4. During a surgery on the small pelvis there was a need to perform an intraoperative uterine artery ligation. Which one of the mentioned below may be accidentally ligated together with it?+

A. Urethra.
B. Uterine tube.
C. Round ligament of uterus.
D. Internal iliac vein.
*** E. Ureter.**

5. During complicated labour the symphysis pubis ruptured. What organ can be damaged mostly? (2005)

A. Rectum
B. Urinary bladder
C. Uterus
D. Ovary

6. In course of small pelvis operation it became necessary to ligate an ovarian artery. What formation may be accidentally ligated together with it? (2008)+

A. Round ligament of uterus
B. Urethra
C. Uterine tube
D. Internal iliac vein
E. Ureter

TASK №13
The male genital organs.

1. An elderly men has complicated urination. Which part of urethra becomes narrower with age the most often?+

A. Pars spongiosa.
B. Glandulae urethrales.
C. M. sphincter urethrae externum.
D. Pars membranacea.
*** E. Pars prostatica.**

2. A man of 35 complains of pain and swelling of the right testicle. Examination has shown a tumor, the surgery of which requires dissection of testicle tunics. Which tunic will be dissected the last before tunica albuginea?

A. Tunica dartos.
B. Tunica spermatica externa.
*** C. Tunica vaginalis testis.**
D. Tunica spermatica interna.
E. Cutis orchis.

3. A male patient, 65, complains of urination disorder. Examination has shown prostatic hypertrophy. Enlargement of what parts of prostate may causethese disturbances?

A. Right lobe.
*** B. Isthmus (middle lobe).**
C. Left lobe.
D. Capsule.
E. Prostatic ducts.

4. A boy was diagnosis a scrotal hernia. The underdevelopment of which testicular membrane caused the hernia?+

A. Fascia spermatica interna.
B. Fascia spermatica externa.
*** C. Tunica vaginalis testis.**
D. Fascia cremasterica.
E. Tunica dartos.

5. A patient is diagnosed with scrotal hydrocele - an increase of fluid quantity in serous sac. Between which testicular tunics is the pathologic content located?+

*** A. Between parietal and visceral layers of vaginal tunic.**
B. Between skin and dartos muscle.
C. Between internal spermatic fascia and vaginal tunic.
D. Between dartos muscle and internal spermatic fascia.
E. Between skin and cremaster muscle.

6. A man complains of frequent and complicated urination. Which internal genital organ pathology caused this?

A. Testicle.
*** B. Prostate.**
C. Bulbourethral glands.
D. Epididymis.
E. Seminal vesicles.

7. A patient complains of frequent and difficult urination. Imperfection of which formation can cause it?

A. Prostate
B. Testicle adnexa
C. Sperm bubbles
D. Testicles
E. Bulb-uretic glands

8. Examination of newborn boy's genitals revealed a cleft of urethra that opens on the inferior surface of his penis. What developmental anomaly is meant?

A. Hypospadia
B. Cryptorchism
C. Epispadia
D. Monorchism
E. Hermaphroditism

9. While performing on inguinal canal operation an account of hernia a surgeon damaged the canals contents. What exactly was damaged? (2008)+

A. Urachus
B. Lig. inguinale

C. Lig teres uteri
D. Broad ligament of uterus
E. Funiculus spermaticus

TASK №14
The female genital organs

1. **A woman was hospitalized with abdominal emergencies symptoms. After the examination fallopian tube rupture accompanying abdominal gestation is suspected. Which pelvis anatomical formation is to be punctured to confirm the diagnosis?**+
   *** A. Rectouterine pouch.**
   B. Vesicouterine pouch.
   C. Rectovesical pouch.
   D. Ischiorectal fossa.
   E. Vaginal process of peritoneum.

2. **During examination of the patient the presence of suppurative exudation in the straight rectouterine pouch was suspected. Through what anatomic formation is it better to puncture the pouch?+**
   *** A. Posterior vaginal fornix.**
   B. Anterior vaginal fornix.
   C. Rectal ampulla.
   D. Pelvic diaphragm.
   E. Anterior vaginal wall.

3. **A woman of 25 has been hospitalized for an ovary tumor surgery. During the operation a ligament connecting the ovary with the uterus is to be dissected. Which one?**
   * **A. Lig. ovarii proprium.**
   B. Lig. cardinale.
   C. Lig. latum uteri.
   D. Lig. suspensorium ovarii.
   E. Lig. umbilicale laterale.

4. **During a gynecologic examination a patient has endometritis (inflammation of endometrium) diagnosed. Which membrane of uterine wall is affected by the inflammatory process?**+
   *** A. Mucous tunic.**
   B. Serous tunic.
   C. Muscular tunic.
   D. Adventitious membrane.
   E. Parametrium.

5. **A 28-year-old woman was admitted to a gynecology department with complaints of pain in the abdominal region. was clinically detected and rescribed to be removed. During the operation a ligament connecting the ovary with the uterus is to be dissected. Which ligament is it?**
   *** A. Lig. ovarii proprium.**
   B. Lig. latum uteri.
   C. Lig. cardinale.
   D. Lig. umbilicalis lateralis.
   E. Lig. suspensorium ovarii.

6. **A 26-year-old woman has an amenorrhea, followed by uterine bleeding,**

pelvic pain, and pelvic mass. Her obstetrician has made a thorough examination of her and diagnosed as having an ectopic pregnancy. Which of the following organs is most likely to provide a normal site of fertilization? +

A. Fundus of the uterus

***B. Ampulla of the uterine tube**

C. Fimbriae

D. Infundibulum of the uterine tube

E. Body of the uterus

The answer is B. Fertilization occurs in the ampulla of the uterine tube and a fertilized oocyte forms a blastocyst by day 7 after fertilization and becomes embedded or implanted in the wall of the uterus during the progestational (secretory) phase of the menstrual cycle. Fertilization is the process beginning with the penetration of the secondary oocyte by the sperm and completed by fusion of the male and female pronuclei.

7. Ovarian tumor was diagnosed in a woman. Surgery should be performed. What ligament should be extracted by the surgeon to disconnect the ovarian end of uterus?

A. Lateral umbilical ligament

B. The ovarian ligament

C. Suspensory ligament of the ovary

D. Round ligament of uterus

E. Broad ligament of uterus

8. A 32-years old patient has been diagnosed with bartholinitis (inflammation of Bartholins glands). In what part of female urogenital system are the Bartholins glands located? (2005)+

A. The labia minora

B. The uterus

C. The clitoris

D. The vagina

E. The labia majora

9. Inflammatory process of modified subserous layer around cervix of the uterus caused an intensive pain syndrome. In what region of genitals does the pathological process take place? (2006)

A. Endometrium

B. Mesometrium

C. Myometrium

D. Perymetrium

E. Parametrium

TASK №15

The immunological system.

1. An 18-year-old youth was admitted to a hospital with the signs of internal bleeding. While playing foot-ball he was hit in the left hypochondriurn region. Damage of which of the organs, projected into this region, may cause profuse bleeding? +

A. Left flexure of colon.

B. Tail of pancreas.

C. Fundus of stomach.

D. Left kidney.

*** E. Spleen.**

2. Children frequently have nasal breathing affection caused by the overgrowth of the pharyngeal mucous membrane lymphoid tissue. Which tonsils excrescence may cause this?

A. Palatine.

***B. Pharyngeal.**

C. Lingual.

D. Tubal.

E. All mentioned.

3. Some children have mouth breath prevailing because of lymphoid tissue overgrowth. Which structures overgrowth causes this?+

A. Lingual tonsil.

B. Palatine tonsil.

*** C. Pharyngeal tonsil.**

D. Tubal tonsil.

E. Lymph nodes.

4. A 10-year-old child complains of pain in the throat. Examination has shown that the cause of this is lymphoid tissue inflammation. Which tonsil is inflamed? +

A. Tubal.

***B. Palatine.**

C. Pharyngeal.

D. Lingual.

E. All mentioned.

5. Some children have mouth breath prevailing because of lymphoid tissue overgrowth. Which structures overgrowth causes this?

A. Lingual tonsil.

B. Palatine tonsil.

***C. Pharyngeal tonsil.**

D. Tubal tonsil.

E. Lymph nodes.

6. The patient with thymus tumor has cyanosis, extension of subcutaneous venous network, edema of soft tissues of the face, neck, upper half of the body, upper limbs. Which venous trunk is blocked?+

*** A. Superior vena cava.**

B. External jugular vein.

C. Subclavian vein.

D. Internal jugular vein.

E. Anterior jugular vein.

TASK №16

The endocrine system.

1. A 30-year-old patient complains of thirst and dry mouth which appeared after severe neurasthenia. Laboratory examination has shown blood sugar in crease up to 10 millimoles per litre. Which endocrine gland is affected?+

*** A. Pancreas gland**

B. Thyroid gland.

C. Sexual gland.

D. Adrenal gland.

E. Epiphysis.

2. A patient with external respiration dysfunctions needs tracheotomy. At the level of which cartilaginous tracheal retractions is the isthmus of thyroid localized the most often?

A. I - II.
B. III - IV.
*** C. II - IV.**
D. IV - V.
E. V - VI.

3. A 27-year-old patient has enlarged hands, feet, and lower jaw. Besides, deformation of articulations, spine, and hormonal disorders have been observed. Which gland is damaged?+

A. Parathyroid.
B. Adrenal.
C. Pineal body.
D. Thyroid gland.
***E. Adenohypophysis.**

4. A patient is very tall, has long thick fingers. big lower jaw and loppy lower lip. The increased secretion of which hormone and gland can be suspected?+

*** A. Somatotropin of adenohypophysis.**
B. Gonadotropin of adenohypophysis.
C. Antidiuretic hormone of neurohypophysis.
D. Thyroid hormones.
E. Glucocorticoids of adrenal glands.

5. A 10-year-old girl has the signs of precocious puberty. Which endocrine gland function decline might have caused this?

A. Thyroid gland.
*** B. Epiphysis.**
C. Parathyroid glands.
D. Thymus.
E. Medullary substance of adrenal gland.

6. A 29-year-old woman with abdominal pain was admitted to a local hospital and examination shows that retroperitoneal infection affects a purely endocrine gland. Which of the following structures is infected? (my)

A. Ovary
B. Suprarenal gland
C. Pancreas
D. Liver
E. Stomach

The answer is B. The suprarenal gland is a retroperitoneal organ, and is a purely endocrine gland. The pancreas is a retroperitoneal organ and contains endocrine cells, but it is not a purely endocrine gland. The liver and stomach contain endocrine cells, but they are not purely endocrine glands and also are surrounded by peritoneum. The ovary contains endocrine cells and is located in the pelvic cavity.

7. A 2-year old child experienced convulsions because of lowering calcium ions concentration in the blood plasma. Function of what structure is decreased?

A. Adrenal cortex
B. Thymus
C. Parathyroid glands
D. Pineal gland
E. Hypophysis

8. A 19-year old female suffers from tachycardia in rest condition, weight loss, excessive sweating, exophtalmos and irritability. What hormone would you expect to find elevated in her serum?

A. Thyroxin
B. Cortizol
C. ACTH
D. Mineralocorticoids
E. Insulin

9. Under some disease it is observed aldosteronism accompanied by hypertension and edema due to sodium retention in the organism. What organ of the internal secretion is affected under aldosteronism?

A. Testicle
B. Pancreas
C. Ovaries
D. Adrenal glands
E. Hypophysis

10. A 46-year-old patient has complained of headache, fatigue, thirst, pains in the spine and joint for the last 2 years. Clinically observed disproportional enlargement of hands, nose, superciliary arches. He notes that he needed to buy bigger shoes three times. What is the man reason of such disproportional enlargement of different part of the body? (2006)

A. Increased sensitivity of the tissues to growth hormone
B. Joint dystrophy development
C. Cartilaginous tissue proliferation under growth hormone influence
D. Increased sensitivity of the tissues to insulin
E. Joints chronic inflammation development

11. Clinical examination of the woman revealed reduction of basal metabolism by 40%, gain in body mass, drop of body temperature, face puffiness, sexual disfunctions, inertness and apathy, lowered intelligence. These symptoms are caused by dis function of the following endocrine gland: (2009)

A. Hypophysis hyperfunction
B. Epiphysis hyperfunction
C. **Hypofunction of the thyroid gland**
D. Hyperfunction of the thyroid gland
E. Hypofunction of the parathyroid gland