OSTEOSYNDESMOLOGY

TASK №1.
Anatomical terminology. Anatomical position, planes and axis. The skeleton of the human body. Bone as an organ. The skeleton of the trunk. The vertebral column. Common features of the vertebrae.

1. During a football match a player injured a knee joint. A roentgenogram shows the fracture of the bone, which is in the thickness of the quadriceps muscle of the thigh tendon. To what group of bones does this bone refer? +

*A. Sesamoid bones.
B. Flat bones.
C. Tubular bones.
D. Pneumatic bones.
E. Mixed bones. (Kyiv)

2. What is the distal and proximal end of a bone?

a. metaphysis
b. apophysis
c. diaphysis
d. epiphysis* (Vinnitsa)

3. What does a firm skeleton contain?

a. bones
b. cartilages
c. both*
d. neither (Vinnitsa)

4. The femur is an example of

a. long bones*
b. short bones
c. flat bones
d. sesamoid or irregular bones (Vinnitsa)

5. The bone consists of all the following parts except

a. epiphysis
b. diaphysis
c. apophysis
d. symphysis*
e. metaphysic (Vinnitsa)

TASK №2.
Individual types of vertebrae: cervical, thoracic and lumbar vertebrae.

1. To establish the border between cervical and thoracic spines a doctor must palpate the process C_{VII}. What process is this?

A. Transverse.
*B. Spinous.
C. Superior articular.
D. Inferior articular.
E. Mastoid. (Kyiv)

2. Which vertebra has the most prominent spine?
A. C2
B. **C7***
C. T10
D. T12
E. C6 (Vinnitsa)

3. How to differenciate between atlas and other cervical vertebraes?
a. It has a transverse process
b. It has a foramen vertebrae
c. It has no body*
d. It has superior articular surface
e. It has transverse foramen (Vinnitsa)

4. How to differentiate between thoracic and cervical vertebrae?
a. It has costal facets on it's body*
b. It has spinous process
c. It has transverse process
d. It has long spinous process (Vinnitsa)

5. Features of thoracic vertebra
a. presence of costal facets*
b. presence of accessory process
c. presence of mamillary process
d. presence of demi face (Vinnitsa)

6. How many facets are there in the body of the 7 thoracic vertebrae?
a. 1 full facet′
b. 1 fult facet anf semi facet
c. 1 semi facet
d. 2 semi facets on superior and inferior*
e. 3 semi facets on superior and inferior (Vinnitsa)

TASK №3.
The sacrum and coccyx. The thoracic cage. The ribs and sternum.

1. One of the following ribs articulate directly with sternum except
A. 2nd rib.
B. 5th rib.
C. 4th rib.
D. 8th rib.*
E. 3d rib. (Gray's Anatomy)

2. True ribs are
a. 7th rib*
b. 8th rib
c. 10th rib
d. 12th rib (Vinnitsa)

3. False ribs are
a. 7th rib
b. 6th rib
c. 10th rib*
d. 12th rib (Vinnitsa)

4. Fluctuantes ribs are?

a. 7th rib
b. 8th rib
c. 10th rib
d. 12th rib* (Vinnitsa)

5. The medial sacral crest is formed due to ossification of the?

a. transverse process
b. articular process
c. spinous process*
d. costal facets
e. transverse ridges (Vinnitsa)

TASK №4.

The skeleton of the head. The bones of the cerebral cranium: occipital, frontal, parietal bones.

1. A casualty has a trauma of soft tissues and parietal bones in the sagittal suture area with profuse bleeding. What formation is probably injured?

A. Sinus rectus.
B. Sinus petrosus superior.
*C. Sinus sagittalis superior.
D. Sinus sagittalis inferior.
E. Sinus transverses. (Kyiv)

2. Which part is not the occipital bone?

a. Basilar part
b. Condylar part
c. Squamous part
d. Membrane Part* (Vinnitsa)

3. The foramen magnum is located on the_____ bone

a. Temporal
b. Maxillary
c. Occipital*
d. Parietal (Vinnitsa)

4. The supraorbital foramen is located on the _____ bone

a. Frontal*
b. Occipital
c. Temporal
d. Sphenoid (Vinnitsa)

5. The occipital bone can be divided into four parts which is except

a. squamous part
b. basilar part
c. left and right lateral part
d. temporal part* (Vinnitsa)

TASK №5.
The skeleton of the head. . The bones of the cerebral cranium: ethmoid and sphenoid bones.

1. After the trauma of the skull on X-ray film was detected fracture of base of the skull. The line of fracture passes through spinous and round foramen. What bone is damaged? +

A. Sphenoid.*
B. Temporal.
C. Ethmoid.
D. Frontal.
E. Occipital. (Vinnitsa)

2. Following foramina are found in greater wing of sphenoid, except

A. Rotundum.
B. Ovale.
C. Spinosum.
D. Optic canal.* (Vinnitsa)

3. The pterygoid process is apart of what bone?

a. occipital
b. temporal
c. parietal
d. sphenoid* (Vinnitsa)

TASK №6.
The bones of the cerebral cranium: temporal bone. Canals of the temporal bone.

1. A child was admitted to an otolaryngologic department with suppurative inflammation of the middle ear. Disease began with nasopharynx inflammation. It is detected that the infection got to the tympanic cavity through the auditory tube located in: +

A. Canalis caroticus.
B. Canaliculus tympanicus.
*C. Canalis musculotubarius.
D. Canaliculus chordae tympani.
E. Canaliculi caroticotympanici. (Kyiv)

2. A child, 6 years old, has suppurative inflammation of the middle ear complicated with suppurative inflammation of mastoid cells. Mastoidotomy is necessary. About what venous sinus must a surgeon remember to avoid its traumatizing?+

*A. Sigmoid.
B. Superior sagitta
C. Inferior sagittal.
D. Transverse.
E. Cavernous. (Kyiv)

4. An 8-year-old boy with purulent otitis has the infecion spread from the tympanic cavity into the bulb of internal jugular vein. Such complication develops in case of one of the tympanic cavity walls thinning. What wall is it?+

A. Medial.
B. Superior.
*C. Inferior.
D. Lateral.

E. Anterior (Kyiv)

4. The roof of tympanic cavity was damaged by purulent otitis. To what cranial fossa can the pus get through the roof from the tympanic cavity?+

*A. Middle.
B. Posterior.
C. Anterior.
D. Orbit.
E. Pterygopalatine. (Kyiv)

5. Which of these surfaces on the pyramid is a part of the middle cranial fossa floor?

A. Inferior surface.
B. External surface.
C. Anterior surface.*
D. Posterior surface.
E. Internal surface. (Vinnitsa)

6. Call the part which lodges with the ganglion of the CN V (nervus trigeminus)?

A Foramen trigeminale.
B. Impressio trigemini.*
C. Fossa jugularis.
D. Sulcus trigeminalis.
E. Foramen lacerum. (Vinnitsa)

7. The pyramid is part of

a. Palatine bone
b. Maxilla bone
c. Sphenoid bone
d. Temporal bone* (Vinnitsa)

TASK №7.
The bones of the visceral cranium.

1. During the first days of a newborn child a pediatrician detected that milk gets into the child's nasal cavity. What malformation does this fact indicate?

*A. Non-closed palate.
B. Diverticulum of esophagus.
C. Esophageal atresia.
D. Cleft clip.
E. Esophagus constriction. (Kyiv)

2. The facial skeleton is also called ...

a. Viscerocranium*
b. Vispacranium
c. Hyppoglossal
d. Ventibular (Vinnitsa)

3. Which of the following is not the facial skeleton bone?

a. Ethmoid bone*

b. Nasal bones
c. Mandible Bone
d. Pa!atine Bone (Vinnitsa)

4. Which one is <u>not</u> considered a bone of the face?
a. Zygomatic
b. Hyoid
c. Spheniod*
d. Palatine (Vinnitsa)

TASK №8.
The skull as a whole. The external and internal surface of base of the skull.

1. A 54-year-old man was admitted to a neurosurgery department with complaints of skin sensitivity absence of the inferior eyelid, lateral surface of the nose, upper lip. During examination the doctor determined the inflammation of the second branch of the trigeminal nerve. Through what cranial foramen does this branch come out?
A. Spinal.
B. Lacerated.
C. Oval.
*D. Round.
E. Superior orbital fissure. (Kyiv)

2. Which of these surfaces on the pyramid is a part of the middle cranial fossa floor?
a., inferior surface
b. External surface
c. Anterior surface
d. Posterior surface* (Vinnitsa)

3. Which canal transmits the internal carotid artery?
a. Facial canai
b. Sacral canal
c. Carotid canal*
d. Hiatus canalis nervi petrosi majoris (Vinnitsa)

4. Which bone articulates with 8 bones?
a. temporal
b. frontal
c. parital
d. sphenoid* (Vinnitsa)

5. The temporal bone articulates with the _____
a. Maxilla
b. Mandible
c. Occipital bone*
d. Frontal Bone
(Vinnitsa)

TASK №9.
The temporal, infratemporal and pterygopalatine fossae.

TASK №10.
The orbit. The nasal cavity. The hard palate.

1. Purulence of orbit soft tissues took place after an eye's trauma. Through what anatomical formation can the purulent process spread to the middle cranial fossa?+

*A. Through the superior orbital fissure.
B. Through the anterior ethmoidal foramen.
C. Through the posterior ethmoidal foramen.
D. Through the inferior orbital fissure.
E. Through the zygomaticoorbital foramen. (Kyiv)

2. During a meal milk gets into the nasal cavity of a newborn child. What is the probable cause of this pathology?

A. Cleft clip.
B. Nasal septum deviation to the right.
C. Basal skull fracture.
*D. Cleft palate.
E. Nasal septum deviation to the left. (Kyiv)

3. Purulence of orbit soft tissues took place after an eye's trauma. Through what anatomical formation can the purulent process spread to the pterygopalatine fossa?+

A. Through the round foramen.
*B. Through the inferior orbital fissure.
C. Through the pterygoid canal.
D. Through the superior orbital fissure.
E. Through the zygomaticoorbital foramen. (Kyiv)

4. A sick has an acute inflammation of nasolacrimal duct mucous membrane. It is known that after influenza nasal discharges had been observed for a long time. From what part of the nasal cavity could the infection get to the nasolacrimal duct?+

A. Superior nasal meatus.
*B. Inferior nasal meatus.
C. Middle nasal meatus.
D. Common nasal meatus.
E. Sphenoethmoidal recess. (Kyiv)

5. A patient has a suppurative inflamination of the sphenoidal sinus. What part of the nasal cavity does the pus flow out into?

*A. Meatus nasi superior.
B. Meatus nasi communis.
C. Meatus nasi medius.
D.Meatus nasi inferior.
E. Infundibulum. (Kyiv)

6. 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. (Kyiv)

7. Chronic rhinitis is complicated with the signs of maxillary sinus mucos tunic affection. (maxillary sinusitis) Through what nasal cavity formattion has the infection spread?

A. Ethmoid cells.
B. Ethmoidal infundibulum.
C. Sphenopalatine foramen.
D. Sphenoethmoidal recess.
*E. Maxillary hiatus. (Kyiv)

8. 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. (Kyiv)

9. 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. (Kyiv)

10. The following are the paranasal sinuses except

a. Transverse sinus*
b. Maxillary sinus
c. Frontal sinus
d. Ethmoidal sinus (Vinnitsa)

TASK №11.
General information on bone articulations. Classification of joints.

1. Example for ellipsoid joint is

a. Wrist*
b. Knee
c. Ankle
d. Shoulder
e. None of the above (Vinnitsa)

2. Which of the following is an example of saddle joint

a. Carpometacarpal joint of the thumb*
b. Elbow joint
c. Ankle joint
d. Knee Joint (Vinnitsa)

3. The pivot joint is

a. Odontoid process of axis and fovea dentis of atlas*
b. Body of vertebrae
c. Temporomandibular joint
d. Hip joint (Vinnitsa)

4. Joint cavity is occupied by

a. Blood
b. Lymph
c. Urine.
d. Sinovia* (Vinnitsa)

5. The example of syndesmosis type of joint is:

a. Sacroiliac
b. Inferior tibiofibular*
c Superior tibiofibular
d. Midtarsal (Vinnitsa)

6. What are the groups in synarthroses ?

a. syndesmoses, synchondroses, synostoses*
b. ligaments, membranes, sutures
c. uniaxial joints, biaxial joints, multiaxial joints
d. ball and socket, hinge joint, pivot joint (Vinnitsa)

7. Name the 4 obligatory components of synovial joints

a. articular capsule, articular cartilage, joint cavity and articulating surfaces*
b. articular cartilage, hyaline and fibrous cartilage, joint cavity,ligaments
c. ligaments, adipos tissue, articulating surfaces, joint cavity
d. joint cavity, connective tissue, adipos tissue, ligaments (Vinnitsa)

8. Which is an uniaxial joint ?

a. pivot*
b. saddle
c. plane
d. condyloid (Vinnitsa)

9. Which is a biaxial joint ?

a. pivot
b. hinge
c. saddle*
d. ball and socket (Vinnitsa)

TASK №12.
The skull of newborn. Articulations between the bones of the skull. The temporomandibular joint.

1. A casualty has a trauma of soft tissues and parietal bones in the place E. Masticatory. of synostosis accompanied by profuse bleeding. What vessel formation has been injured?

*A. Sinus sagittalis superior.
B. Sinus transversus.
C. Sinus petrosus superior.
D. Sinus rectus.
E. Sinus sagittalis inferior. (Kyiv)

2. As a result of trauma the anterior fontanelle of a child was injured. What type of bone articulation is this?

*A. Syndesmosis.
B. Synchondrosis.
C. Synostosis.
D.Diarthrosis.
E. Symphisis. (Kyiv)

3. Following are the fontanelles of the skull except

a. anterior
b. posterior
c. spheinoidal
d. mastoid
e. styloid* (Vinnitsa)

4. What kind of joint is the temporomandibular joint ?

a. simple.
b. complex
c. combined.
d. all of above*. (Vinnitsa)

TASK №13.
Articulations between the bones of the trunk. The vertebral column as a whole. Articulations between the vertebral column and skull.

1. After a fall from a height a casualty is diagnosed a compression fracture of lumbar vertebra. The curvature of lumbar lordosis has sharply increased. Injury of what ligaments can cause such change of vertebral column curvature?

A. Intertraverse.
B. Posterior longitudinal.
C. Yellow.
D. Supraspinal.
*E. Anterior longitudinal. (Kyiv)

2.X-ray examination of a patient has shown a thoracic spine disk herniation. What kind of vertebrae conjugation has undergone pathological changes?

A. Syndesmosis.
B. Diarthrosis.
*C. Synchondrosis.
D. Articulation.
E. Synostosis. (Kyiv)

3. Cerebrospinal fluid of a 45-year-old patient with brain fever suspected is to be got. A diagnostic puncture has been made between the arches L_{III} —L_{IV}. What ligament must the needle penetrate?

A. Posterior longitudinal.
B. Iliolumbal.
C. Anterior longitudinal.
*D. Yellow.
E. Intertransverse. (Kyiv)

4. A 33-year-old male patient complains of feeling severe pain when he tries to turn his neck. A physician realizes that the problem is in his pivot (trochoid) joint. Which of the following joints would most likely be examined?

A. Atlanto-occipital joint.
B. Atlantoaxial joint.*
C. Carpometacarpal joint.
D. Proximal tibiofibular joint.
E. Intervertebral disks. (Gray's Anatomy)

TASK №14.
Articulations between the ribs and sternum. The thoracic cage as a whole.

1. One of the following ribs articulate directly with sternum except

a. 2nd rib
b. 5th rib
c. 4th rib
d. 8th rib* (Vinnitsa)

2. The sternoclavicular joint is a

a. plane joint*
b. trochlear joint
c …fibrous joint (Vinnitsa)

TASK №15.
The skeleton of the upper limb: scapula, clavicle and humerus.

1. According to statistics, bones fractures of young and elderly people most often happen in the surgical neck area. What bone has this formation?

A. Fibula.
B. Radius.
C. Tibia.
*D. Humerus.
E. Talus. (Kyiv)

2. The woman 45 years after dip from a bicycle has addressed in trauma department with the petitions on pain, tumescence in deltoid region. What part and of what bone was fractured?

a. Anatomical neck of the humerus
b. Deltoid tuberosity of the humerus
c. Acromial end of clavicle
d. Surgical neck of the humerus*
e. Neck of the scapula (Vinnitsa)

3. The shoulder joint is also known as the:

a. glenohumeral*
b. glenofemural
c. glenotuberal
d. glenofebural (Vinnitsa)

TASK №16.
The skeleton of the upper limb: the bones of the forearm and hand.

1. The victim of an automobile accident has a destructive injury of the proximal row of carpal bones. Which of the following bones is most likely damaged?

A. Capitate.
B. Hamate.
C. Trapezium.
D. Triquetrum.*
E. Trapezoid. (Gray's Anatomy)

2. Which of the following bones does not form the proximal row of carpal bones?

a. Scaphoid
b. Lunate
c. Triquetrum
d. Capitate* (Vinnitsa)

TASK №17.
Articulations between the bones of the upper limb: the shoulder and elbow joints.

1. How many joints are there in an elbow joint?

a. 1
b. 2
c. 4
d. 3* (Vinnitsa)

TASK №18.
Articulations between the bones of the forearm. Radiocarpal joint and joints of the hand.

1. What type of joint is the first carpometacarpal joint?

a. pivot
b. hinge
c. saddle*
d. ball and socket (Vinnitsa)

TASK №19.
The skeleton of the lower limb: hip and thigh bones.

1. Because of a fall a 70-year-old man had a femur fracture. In what part of femur do fractures happen the most often?+

A. Middle.
*B. Neck.
C. The upper third.
D. The lower third.
E. Condylus. (Kyiv)

2. A 62-year-old woman slips and falls on the bathroom floor. As a result, she has a posterior dislocation of the hip joint and a fracture of the neck of the femur. If the acetabulum is fractured at its posterosuperior margin by dislocation of the hip joint, which of the following bones could be involved? +

A. Pubis.
B. Ischium.
C. Ilium.*
D. Sacrum.
E. Head of the femur. (Gray's Anatomy)

3. At a trauma of pelvis on x-ray film the necrosis of the head of a femoral bone is detected. That from of following ligaments contents of an artery, which supply the head of a femur, was injured during a trauma.+

A. Pubofemoral ligament.
B. Ischiofemoral ligament.
C. Iliofemoral ligament.
D. Orbicularis zone.
E. Capitis femoris ligament.* (Vinnitsa)

4. Weight of the body is supported in sitting posture by

a. Ischial tuberosity*
b. Ramus of Ischium
c. Body of ischium
d. Pubis (Vinnitsa)

TASK №20.
The bones of the leg and foot.

1. After collision of two cars a driver got deformation of the middle third of his left crus, intensive pain, especially in attempt to move the left crus. Ends of the trihedral bone come out of the wound, hemorrhage is increasing. What bone can be injured?

*A. Tibia.
B. Fibula
C. Femur.
D. Patella.
E. Talus. (Kyiv)

2. The tarsus formed by _____bones

a. 5
b. 7*
c 9
d. 4 (Vinnitsa)

TASK №21.
Articulations between the bones of the pelvis. The pelvis as a whole. The hip joint.

1. A gynecologist dimensioned the pelvis of a 29-year-old pregnant woman. The distance between two anterior superior iliac spines was measured with the help of a pelvimeter. What size of the large pelvis was dimensioned?+

*A. Interspinous distance.
B. Intercristal distance.
C. Intertrochanteric distance.
D. True conjugate.
E. Anatomical conjugate. (Kyiv)

2. X-ray examination of pelvis shows that all three parts of the hip bone are disconnected by gaps, which correspond to a cartilage, not seen in the roentgenogram. What age is it typical of?

A. Until 50 years.
B. Until 25 years.
C. Until 30 years.
D. Until 40 years.
*E. Until 16 years. (Kyiv)

3. The strongest ligament in the body is

a. Inguinal ligament
b. Lacunar ligament
c. Ligamentum flava
d. Iliofemoral ligament* (Vinnitsa)

TASK №22.

The knee joint. Articulations between the bones of the leg. The talocrural (ankle) joint. The joints of the foot. The arches of the foot.

1. A 25-year-old man appealed to a doctor with complaints of movements damage in the knee joint - anteroposterior displacement of the crus about the femur (so-called drawer sign) – that appeared after a trauma. What ligaments of the knee joint are injured?+

A. Collateral.
B. Arcuate popliteal.
C. Oblique popliteal.
D. Interosseous membrane of leg.
*E. Cruciate. (Kyiv)

2. A 10-year-old boy falls from a tree house. The resultant heavy compression of the sole of his foot against the ground caused a fracture of the head of the talus. Which of the following structures is unable to function normally?

A. Transverse arch.
B. Medial longitudinal arch.*
C. Lateral longitudinal arch.
D. Tendon of the peroneus longus.
E. Long plantar ligament. (Gray's Anatomy)

3. A 20-year-old college student receives a severe blow on the infero-lateral side of the left knee joint while playing football. Radiographic examination reveals a fracture of the head and neck of the fibula. If the lateral (fibular) collateral ligament is torn by this fracture, which of the following conditions may occur?

A. Abnormal passive abduction of the extended leg.
B. Abnormal passive adduction of the extended leg.*
C. Anterior displacement of the femur on the tibia.
D. Posterior displacement of the femur on the tibia.
E. Maximal flexion of the leg. (Gray's Anatomy)

4. To the 50 years old man with a broken after trauma foot, was made partial ablation by disarticulation in a transversal tarsi joint. The «key» of this joint is:+

A. Bifurcated ligament.*
B. Posterior tarsometatarseal ligament.
C. Anterior tarsometatarseal ligament.
D. Plantaria tarsometetersea! ligament.
E. Dorsal metatarsal ligament. (Vinnitsa)

5. The pattela takes part in the formation of _____joint

a. knee*
b. elbow
c. temporomandibular
d. hip (Vinnitsa)

MYOLOGY

1. A 22-year-old man presented to his family physician with a laceration of the fibrous sheets or bands that cover his body under the skin and invest the muscles. Which of the following structures would most likely be injured?

A. Tendon.
B. Fascia.*
A. Synovial tendon sheath.
B. Aponeurosis.
E. Ligament. (Gray's Anatomy)

2. Muscles can be divided into 3 groups that is of the following except

a. smooth muscles
b. skeletal muscles
c. rough muscles*
d. cardiac muscles (Vinnitsa)

TASK №23.
Muscles and fasciae of the back.

1. The conductor of an orchestra cannot get from a pocet a ticket. What muscle defaults of the function?+

a. Deltoid muscle
b. Trapezoidal muscle
c. Pectoralis major muscle
d. Latissimus dorsi muscle*
e. Rhomboid muscle (Vinnitsa)

TASK №24.
Muscles and fasciae of the chest. The thoracoabdominal diaphragm.

1. The patient has a pain in the thoracic cage at breathing, dyspnoea, and handicapping in cough motions, hiccup. What respiratory muscles are struck? +

a. External intercostal
b. Internal intercostal
c. Serratus anterior
d Diaphragm (musculus phrenicus)*
e. Muscles of the anterior abdominal wall (Vinnitsa)

TASK №25.
Muscles and fasciae of the abdomen.

TASK №26.

Subdivision of the abdomen into regions. The sheath of the rectus abdominis muscle. The linea alba of the abdomen. The inguinal canal and its clinical significance.

1. During an operation on femora hernia the lateral wall of the deep femoral ring was touched. What anatomic formation was damaged? +

A. Inguinal ligament.
*B. Femoral vein.
C. Femoral artery.
D. Iliopectineal arch.
E. Pectineal ligament. (Kyiv)

2. A 2-year-old boy presents with pain in his groin that has been increasing in nature over the past few weeks. He is found to have a degenerative malformation of the transversalis fascia during development. Which of the following structures on the anterior abdominal wall is likely defective?+

A. Superficial inguinal ring.
B. Deep inguinal ring.*
C. Inguinal ligament.
D. Sac of a direct inguinal hernia.
E. Anterior wall of the inguinal canal. (Gray's Anatomy)

3. Posterior wall of the vagina of the rectus abdominis muscle inferiorly to the umbilicus is formed by:

A. Peritoneum.
B. Transverse fascia.*
C. Superficial fascia.
D. Aponeurosis of the transverse fascia.
E. Oblique fascia. (Vinnitsa)

4. Deep inguinal ring is a defect in the

A. External oblique muscle.
B. Internal oblique muscle.
C. Transversus abdominis muscle.
D. Transversal fascia.*
E. Peritoneum. (Vinnitsa)

5. The hypogastric region includes the following regions excepting:

A. The left inguinal region.
B. The right inguinal region.
C. Regio epigastrica propria (central epigastric region).*
D. The pubic region. (Vinnitsa)

6. The anterior wall of the inguinal canal is formed by:

a. External oblique muscle*
b. Internal oblique muscle
c. Transversus abdominis muscle
d. Transversal fascia
e. Peritoneum (Vinnitsa)

7. The posterior wall of the inguinal canal is formed by:

a. External oblique muscle
b. Internal oblique muscle
c. Transversus abdominis muscle
d. Transversal fascia* (Vinnitsa)

8. On the patient's anterior abdominal wall under a skin the doctor has found out an extrusion. The doctor suspects availability of a hernia. In what weak places of anterior abdominal wall the formation of such hernias is possible?

a. The left subcostal area
b. White line, umbilical ring or inguinal canal*
c. Femoral ring
d. Lacuna musculorum"
e. Vagina of the rectus abdominis muscle (Vinnitsa)

9. The inferior wall of the inguinal canal is formed by:+

a. External oblique muscle
b. Internal oblique muscle
c. Transversus abdominis muscle
d. Transversal fascia
e. Inguinal ligament* (Vinnitsa)

10. The linea alba is a

a. Region of the perineum
b. Part of the calcaneal tendon
c. Section of the tensor fasciae latae
d. Muscle of the ventral abdominal wall
e. Common tendon of the muscle of the ventral abdominal wall* (Vinnitsa)

11. The mesogastric region includes the following regions excepting:

a. The left lateral region
b. The right latera region
c. Regio epigastrica propria (central epigastric region)*
d. The umbilical region (Vinnitsa)

12. Superficial inguinal ring is a defect in the

a. External oblique muscle*
b. Internal oblique muscle
c. Transversus abdominis muscle
d. Transversal fascia
e. Peritoneum (Vinnitsa)

13. Deep inguinal ring is a defect in the----------inguinal canal-wall?

a. Anterior
b. Posterior*
c. Inferior
d. Superior (Vinnitsa)

14. Superficial inguinal ring is a defect in the----------inguinal canal-wall?

a. Anterior*
b. Posterior
c. Inferior
d. Superior (Vinnitsa)

15. The superior wall of the inguinal canal is formed by:

a. External oblique muscle
b. Internal oblique muscle. Transversus abdominis muscle*
c. Transversal fascia
d. Inguinal ligament (Vinnitsa)

16. The epigastric region includes the following regions excepting:

a. The left hypochondriac region
b. The right hypochondriac region
c. Regio epigastrica propria (central epigastric region)
d. The umbilical region* (Vinnitsa)

TASK №27.
Muscles and fasciae of the head.

1. A man, 30 years old, appealed to a dentist complaining of mastication disorder: painful backward movement of the mandible. The doctor detected the inflammation of a masticatory muscle. Which muscle exactly is it? +

*A. Temporal (posterior fibres).
B. Temporal (anterior fibres).
C. Medial pterygoid.
D. Lateral pterygoid.
E. Masticatory. (Kyiv)

2. A boy, 8 years old, cannot put lips round, the angles of the mouth are pulled out and up, and oral fissure is stretched aside. What muscle is injured?+

A. Risorius.
B. Greater zygomatic.
C. Buccinator.
*D. Orbicularis oris muscle
E. Masticatory. (Kyiv)

3. During a traffic accident a driver got multiple injuries of the lateral face area including jugal bridge fracture. Which muscle function is affected?

*A.Masseter.
B. Orbicular muscle of mouth.
C. Buccinator.
D. Procerus.
E. Risorius. (Kyiv)

4. Right palpebral fissure of a patient is noticeably bigger than the leftperformed? Which facial muscle function is damaged?+

*A. Orbicular muscle of eye.
B. Procerus.
C. Corrugator.supercilii
D. Occipitofrontal (frontal belly).
E. Greater zygomatic. (Kyiv)

5. Muscles of mastication functionally accomplish the

a. the movement of lower limb
b. the movement of the neck
c. the movement of chewing*
d. the movement of the fingers (Vinnitsa)

TASK №28.
Muscles and fasciae of the neck.

1. A mother appealed to a pediatriacian complaining of her 1-year-old child's neck always turned to the left (torticollis). What neck muscle is underdeveloped?+

*A. Sternocleidomastoid.
B. Platysma.
C. Digastric.
D. Long muscle of neck.
E. Thyrohyoid. (Kyiv)

2. A patient complains of pain in the left part of the neck while moving. The best painless position is bending the neck to the left with simultaneous raising of the chin and rotation of the face to the opposite side. What muscle is injured?

A. Right trapezius.
B. Right sternocleidomastoid.
C. Left trapezius.
*D. Left sternocleidomastoid.
E. Sternohyoid. (Kyiv)

3. The patient need of tracheostomy (inputting of metal tube in trachea). What muscle the surgeon must extend during operation?

a. Sternohyoid muscle*
b. Stylohyoid muscle
c. Digastric muscle
d. Sternocleidomastoid muscle
e. Omohyoid muscle (Vinnitsa)

TASK №29.
Topography of the neck.

1. A patient was admitted to an intensive therapy department with heavy poisoning. To provide holiatry it is necessary to catheterize the patient and inject medicines into subclavian vein. In what topographical place is it localized? +

A. Spatium interscalenum.
*B. Spatium anterscalenum.
C. Spatium retrosternocleidomastoideus.
D. Spatium interaponeuroticum suprasternale.
E. Trigonum omotrapezoideum. (Kyiv)

2. A 37-year-old patient had a cough, then asphyxia because a foreign body got into the respiratory tracts. Tracheotomy was made in the neck region limited by the superior belly of omohyoid muscle, sternocleidomastoid muscle and the median neck line. In what triangle of neck was the operation performed?+

A. Carotid.
*B. Omotracheal.
C. Submandibular.
D. Omotraperoid.
E. Omoclavicularю (Kyiv)

93 Posterior boundary of carotid triangle is:

a. Superior belly of omohyoid muscle
b. Posterior belly of digastric muscle
c. Sternohyoid muscle
d. Sternocleidomastoid muscle* (Vinnitsa)

4. Superior boundary of carotid triangle is:

a. Posterior belly of omohyoid muscle
b. Posterior belly of digastric muscle*
c. Sternohyoid muscle
d. Sternocleidomastoid muscle (Vinnitsa)

5. The superior boundary of the submandibular triangle is formed by:

a. Superior belly of omohyoid muscle
b. Posterior and anterior belly of digastric muscle
c. Lower jaw
d. Sternocleidomastoid muscle
e. Upper jaw* (Vinnitsa)

6. Anterior boundary of carotid triangle is:

a. Superior belly of omohyoid muscle*
b. Posterior belly of digastric muscle
c. Sternohyoid muscle
d. Sternocleidomastoid muscle (Vinnitsa)

7. The inferior boundary of the submandibular triangle is formed by_____muscle:

a. Superior belly of omohyoid muscle
b. Posterior and anterior belly of digastric muscle*
c. Sternohyoid muscle
d. Sternocleidomastoid muscle (Vinnitsa)

TASK №30.
Muscles of the upper limb.

1. A 45-year-old man was admitted to a traumatology center after a shoulder home accident. Examination has shown the absence of extension, adduction and pronation functions of the shoulder. What muscle has been injured?+

A. Supraspinatus.
B. Subscapularis.
C. Teres minor.
D. Infraspinatus.
*E.Teres major. (Kyiv)

2. An X-ray examination has shown a comminuted fracture of the infraglenoid tubercle of a patient with a trauma in the shoulder joint area. Tendon of what muscle head beginning in this place has been damaged?

*A. A long head of m. triceps brachii.
B. A long head of m. biceps brachii.
C. A medial head of m. triceps brachii.
D. A lateral head of m. triceps brachii.
E. A short head of m. biceps brachii. (Kyiv)

3. A 38-year-old man with a right hand trauma has been taken to a traumatology center. Examination has shown an incised wound in the region of the right hand thumb eminence; the distal phalanx of the I finger does not bend. What muscle has been damaged?

*A. Long flexor of thumb.
B. Short flexor of thumb.
C. Short abductor muscle of thumb.
D. Opposer muscle of thumb.
E. Adductor of thumb. (Kyiv)

4. A 39-year-old man has been taken to a traumatology center with a left hand trauma. Examination has shown an incised wound in the region of the left hand thumb eminence; the proximal phalanx of the I finger does not bend. What muscle has been damaged?

A. Adductor of thumb.
B. Long flexor of thumb.
C. Short abductor muscle of thumb.
D. Opposer muscle of thumb.
*E. Short flexor of thumb. (Kyiv)

5. A patient complains of impossible external rotation caused by a shoulder trauma in the great tubercle humeri area. What muscles are injured?

A. Supraspinatus and teres major.
*B. Infraspinatus and teres minor
C. Subscapular and coracobrachial.
D. Deltoid and supraspinatus.
E. Teres major and teres minor. (Kyiv)

6. A man can not bend his arm in the elbow joint because of a wound of anterior shoulder surface. Which muscle is injured?+

A. Anconeus.
B. Deltoid.
C. Pectoral major.
D. Triceps brachial.
*E. Biceps brachial. (Kyiv)

7. After an injury a patient can not raise his hand to the horizontal level. Which muscle is injured?+

A. Triceps muscle of arm.
B. Biceps muscle of arm.
*C. Deltoid.
D. Trapezius.
E. Broadest muscle of back. (Kyiv)

8. A 16-year-old patient has weakness flexing the metacarpophalangeal joint of the ring finger and is unable to adduct the same finger. Which of the following muscles is most likely paralyzed?

A. Flexor digitorum profundus.
B. Extensor digitorum.
C. Lumbrical.
D. Dorsal interosseous.
E. Palmar interosseous.* (Gray's Anatomy)

9. A patient comes in complaining that she cannot flex her proximal interphalangeal joints. Which of the following muscles appears to be paralyzed on further examination of her finger?

A. Palmar interossei.
B. Dorsal interossei.
C. Flexor digitorum profundus.
D. Flexor digitorum superficialis.*
E. Lumbricals. (Gray's Anatomy)

10. A 21-year-old woman walks in with her shoulder and arm injury after falling from a horseback riding. Examination indicates that she cannot adduct her arm because of paralysis of which of the following muscles?

A. Teres minor.
B. Supraspinatus.*
C. Latissimus dorsi.
D. Infraspinatus.
E. Serratus anterior. (Gray's Anatomy)

11. A patient with Bennett's fracture (a fracture of the base of the first metacarpal bone) experiences an impaired thumb movement. Which of the following intrinsic muscles of the thumb is most likely injured?

A. Abductor pollicis brevis.
B. Flexor pollicis brevis (superficial head).
C. Opponens pollicis.*
D. Adductor pollicis.
E. Flexor pollicis brevis (deep head). (Gray's Anatomy)

12. A construction worker suffers a destructive injury of the structures related to the anatomic snuffbox. Which of the following structures would most likely be damaged?

A. Triquetral bone.
B. Trapezoid bone.
C. Extensor indicis tendon.
D. Abductor pollicis longus tendon.
E. Radial artery.* (Gray's Anatomy)

13. A rock climber falls on his shoulder, resulting in chipping off the lesser tubercle of the humerus. Which of the following structures would most likely have structural and functional damage?

A. Supraspinatus muscle.
B. Infraspinatus muscle.
C. Subscapularis muscle.*
D. Teres minor muscle.
E. Coracohumeral ligament. (Gray's Anatomy)

14. A 37-year-old female patient has a fracture of the clavicle. The junction of the inner and middle third of the bone exhibits overriding of the medial and lateral fragments. The arm is rotated medially, but it is not rotated laterally. The lateral portion of the fractured clavicle is displaced downward by which of the following?

A. Deltoid and trapezius muscles.
B. Pectoralis major and deltoid muscles.
C. Pectoralis minor muscle and gravity.
D. Trapezius and pectoralis minor muscles.
E. Deltoid muscle and gravity.* (Gray's Anatomy)

15. The structures taking origin from the tip of coracoid process are:

A. Short head of biceps. *
B. Long head of triceps.
C. M. Teres minor.
D. M. subscapularis.
E. Long head of biceps. (Gray's Anatomy)

16. After a trauma patient cannot extend upper limb in an elbow joint. What muscle was damaged?

A. Musculus levator scapula
B. Musculus infraspinatus
C. Musculus triceps brachii
D. Musculus teres major
E. Musculus subscapulars (Vinnitsa)

17. What muscle of the anterior group of a **shoulder acts on two joints?**

a. Musculus anconeus
b. Musculus triceps brachii
c. Musculus biceps brachii*
d. Muscutus brachials
e. Musculus brachio-radiafis (Vinnitsa)

18. Patient cannot abduct the upper limb from the trunk. What muscle defaults of the function?

a. Deltoid muscle*
b. Teres major muscle
c. Teres minor muscle
d. Infraspinatus muscle
e. Supraspinatus muscle (Vinnitsa)

19. The man 26 years of age has a trauma of the upper third of arm. At examination of damages of bones was not detected, but absent extension of the forearm. What muscle was injured?

a. Coracobrachialis muscle
b. Anconeus
c. Biceps brachii muscie
d. Triceps brachii muscle*
e. Posterior tibial muscie (Vinnitsa)

20. The 35-year-old man received the cutting trauma of the lateral surface of the palm of hand. Also was detected of limitation of abduction and flexion of thumb. What muscle was injured?

a. Lumbricales muscles
b. Abductor pollicis brevis muscle*
c. Opponens pollicis muscle
d Flexor pollicis brevis muscle
e. Adductor poilicis muscle (Vinnitsa)

21. The patient cannot abduct and adduct fingers of the hand. A function what muscles was affected.

a. Dorsal interossei muscles*
b. Lumbricales muscles
c. Ventral interossei muscles*
d. Flexor digitorum superficialis muscle
e. Flexor digitorum profundus muscle (Vinnitsa)

22. Flexors of the elbow are excepting

a. Brachialis muscle
b. Biceps muscle
c. Brachioradialis muscle
d. Caracobrachialis muscle* (Vinnitsa)

23. Each of the following has an attachment to scapula except:

a. Pectoralis major muscle*
b. Pectoralis minor muscle
c. Biceps brachii muscle
d. Triceps muscle (Vinnitsa)

TASK №31.
Fasciae and topography of the upper limb.

1. Little finger felon was complicated by the phlegmon of hand and forearm. Purulent process has spread over: +

*A. Vagina communis tendinum musculorum flexorum.
B. Vagina tendinis musculi flexoris pollicis longi.
C. Canalis carpalis.
D. Vagina tendinis musculi flexoris carpi radialis.
E. Interfascial compartments. (Kyiv)

2. A child, 8 years old, was admitted to a clinic with an incised wound of the right leg sole. Debridement has shown a deep wound with tendon in the plantar region near the lateral border of the foot. Lifting of the lateral border of the foot is limited. The function of what muscle has been affected?+

A. M. tibialis anterior.
*B. M. peroneus longus.
C. M. extensor digitorum longus.
D. M. quadriceps femoris.
E. M. triceps surae. (Kyiv)

3. A patient has complications of hand movements. Inflammation of common synovial sheath for flexor tendons has been diagnosed. According to anamnesis, a week before the patient got a punctured wound of a finger. Which finger is injured?

*A. Little finger.
B. Thumb.
C. Middle finger.
D. Index finger.
E. Ring finger. (Kyiv)

4. A patient has a fissure of the shaft of humerus posterior surface diagnosed. Symptoms of the radial nerve ıпjury in the region of canalis humeĸomuscularis are observed. What is this canal limited by?

*A. Posterior surface of humerus and triceps muscle of arm.
B. Anterior surface of humerus and biceps muscle of arm.
C. Anterior surface of humerus and coracobrachial.
D. Anterior surface of humerus and brachial.
E. Posterior surface of humerus and anconeus. (Kyiv)

5. A 27-year-old baseball player is hit on his forearm by a high-speed ball during the World Series, and the muscles that form the floor of the cubital fossa appear to be torn. Which of the following groups of muscles has lost their functions?

A. Brachioradialis and supinator.
B. Brachialis and supinator.
C. Pronator teres and supinator.
D. Supinator and pronator quadratus.
E. Brachialis and pronator teres.* (Gray's Anatomy)

TASK №32.
Muscles of the lower limb.

1. During physical training a 15 year-old pupil felt pain in the hip joint area after the lower extremity internal rotation. Traumatologist detected an injury of a muscle tendon. What muscle is it?

A. M. piriformis.
B. M. obturatorius internus.
C. M. obturatorius externus.
*D. M. gluteus medius.
E. M. quadratus femoris. (Kyiv)

2. During a game a basketball-player injured his right leg in consequence inflammation of which he couldn't bend the right foot. A doctor detected that tendons were injured. The tendon of what muscle was injured?

*A. Triceps surae
B. Extensor hallucis longus.
C. Tibialis anterior.
D. Biceps femoris.
E. Sartorius. (Kyiv)

3. A man, 30 years old, appealed to traumatologist with an incised wound of the left foot plantar region. The injured had problems with lifting the lateral border of the foot. What muscle function was affected?

A. Triceps surae.
B. Tibialis anterior.
C. Flexor hallucis longus.
D.Peroneus longus.
E. Soleus. (Kyiv)

4. As a result of tibia fracture the anterior muscle of leg was injured. The function of what muscle is affected?

*A. Extensor hallucis longus.
B. Flexor digitorum longus.
C. Peroneus longus.
D. Soleus.
E. Extensor digitorum brevis. (Kyiv)

5. A basketball-player complains of pain in the calcaneal region, which tensifies while walking. What muscle tendon is injured?

A. Long peroneal muscle.
B. Posterior tibial muscle.
C. Long flexor muscle of toes.
*D. Triceps muscle surae.
E. Short peroneal muscle. (Kyiv)

6. After an accident a patient has severe painfullness and anterior leg surface edema, dorsal flexion of the foot is difficult. Which muscle functions are damaged?

A. Long peroneal muscle.
B. Long flexor muscle of toes.
C. Long flexor muscle of great toe.
*D. Anterior tibial.
E. Short peroneal muscle. (Kyiv)

7. A 20-year-old patient cannot flex and medially rotate the thigh while running and climbing. Which of the following muscles is most likely damaged?

A. Semimembranosus.
B. Sartorius.*
C. Rectus femoris.
D. Vastus intermedius.
E. Tensor fasciae latae. (Gray's Anatomy)

8. A 21-year-old man was involved in a motorcycle accident, resulting in destruction of the groove in the lower surface of the cuboid bone. Which of the following muscle tendons is most likely damaged?

A. Flexor hallucis longus.
B. Peroneus brevis.
C. Peroneus longus. *
D. Tibialis anterior.
E. Tibialis posterior. (Gray's Anatomy)

9. A 52-year-old woman slipped and fell and complained of being unable to extend her leg at the knee joint. Which of the following muscles was paralyzed as a result of this accident?

A. Semitendinosus.
B. Sartorius.
C. Gracilis.
D. Quadriceps femoris.*
E. Biceps femoris. (Gray's Anatomy)

10. A patient experiences paralysis of the muscle that originates from the femur and contributes directly to the stability of the knee joint. Which of the following muscles is involved?

A. Vastus lateralis.*
B. Semimembranosus.
C. Sartorius.
D. Biceps femoris (long head).
E. Rectus femoris. (Gray's Anatomy)

11. An elderly woman fell at home and fractured the greater trochanter of her femur. Which of the following muscles would continue to function normally?

A. Piriformis.
B. Obturator internus.
C. Gluteus medius.
D. Gluteus maximus.*
E. Gluteus minimus. (Gray's Anatomy)

12. A 35-year-old man has difficulty in dorsiflexing the foot. Which of the following muscles is most likely damaged?

A. Tibialis posterior.*
B. Flexor digitorum longus.
C. Tibialis anterior.
D. Peroneus longus.
E. Peroneus brevis. (Gray's Anatomy)

13. A 34-year-old man with a fracture of the lesser trochanter has difficulty in flexing his thigh. Which muscle is most likely paralyzed?+

A. Gluteus maximus muscle.
B. Gluteus medius muscle.
C. Iliopsoas muscle.*
D. Piriform muscle.
E. Adductor magnus muscle. (Gray's Anatomy)

14. ln ill with a knife wound of a femur the hindered extension of leg. What muscle has suffered more strongly?+

a. Quadriceps femoris muscle*
b. Biceps femoris muscle
c. Semitendinosus muscle
d. Semimembranosus muscle
e. Sartorius (Vinnitsa)

15. During the final game basketball player damage right leg, owing to this it became impossible to plantar flex right foot. The doctor of a team has established that is damaged tendon of the muscle. Tendon of what muscle was damaged?

a. Biceps femoris
b. Sartorius muscie
p. Anterior tibial muscle
d. Triceps surae (Achill tendon)*
e. Posterior tibial muscie (Vinnitsa)

16. The 30-year-old man received the cutting trauma of the lateral sole surface of the left foot. The patient has restricted rise of the lateral margin of the foot. What muscle was affected?+

a. Soleus muscle
b. Triceps surae
c. Tibial anterior muscle
d. Fibularis longus muscle*
e. Fibuiaris brevis muscle (Vinnitsa)

17. Sartorius muscle takes origin from

a. Pectinate line
b. Anterior superior iliac spine*
c. Body of the ileum
d. Ischial tuberosity (Vinnitsa)

18. Lateral rotators of the hip are all except

a. Piriformis muscle
b. Quaclratus femoris muscle
c. Obturator intemus muscle
d. Psoas major muscle* (Vinnitsa)

19. The flexor of the hip is

a. Iliopsoas muscle*
b. Vastus medialis muscle
c. Quadratus fernoris muscle
d. Gluteus maximus muscle (Vinnitsa)

20. Extensor of the knee is by

a. Biceps femoris muscle
b. Quadriceps femoris muscle*
c. Sartorius muscle
d. Semimembranosus muscle (Vinnitsa)

TASK №33.
Fasciae and topography of the lower limb.

1. A construction worker falls feet-first from a roof. He sustains a fracture of the groove on the undersurface of the sustentaculum tali of the calcaneus bone. Which of the following muscle tendons is most likely torn?

A. Flexor digitorum brevis.
B. Flexor digitorum longus.
C. Flexor hallucis brevis.
D. Flexor hallucis longus.*
E. Tibialis posterior. (Gray's Anatomy)

2. Floor of the femoral triangle is formed by the following muscles, except the:

a. Pectineus muscle
b. Psoas muscle
c. Iliacus muscle
d. Adductor brevis muscle* (Vinnitsa)