

University of Szeged, Faculty of Medicine
Department of Anatomy, Histology and Embryology

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**ANATOMY END-SEMESTER EXAM TOPICS
FOR 1ST-YEAR STUDENTS OF MEDICINE
ACADEMIC YEAR 2013/2014, 1ST SEMESTER**

Dentistry students should not demonstrate the anatomical structures on the cadaver at the ESE.

I. GENERAL ANATOMY AND ANATOMY OF THE UPPER LIMB

1. General features and classification of bones. Types of ossification.
2. Connections between bones. Classification and general description of joints.
3. Types of muscles. General features of skeletal muscles and fasciae. Innervation and regeneration of muscles
4. The bones, joints and movements of the shoulder girdle. Radiological anatomy of the shoulder girdle.
5. The gross and radiological anatomy and movements of the shoulder joint and the participating muscles. The rotator cuff.
6. The gross and radiological anatomy and movements of the elbow joint and the participating muscles.
7. Pronation and supination: participating joints and muscles.
8. The gross and radiological anatomy and movements of the wrist joint and the participating muscles.
9. Joints and movements of the hand. Radiological anatomy of the hand.
10. The anatomy, innervation and function of the spinohumeral and thoracohumeral muscles.
11. Classification (types) and innervation of blood vessels. Types of vascular anastomoses.
12. The systemic circulation: the large branches of the aorta and the great veins.
13. The branches and anastomoses of the axillary artery.
14. The branches of the brachial artery; collateral circulation of the elbow.

15. Palmar arterial arches: topography and branches.
16. The venous and lymphatic drainage of the upper limb.
17. The organization of spinal cord segments and spinal nerves. The cranial nerves and their main functions.
18. Trunks, cords and nerves of the brachial plexus.
19. The injuries to the brachial plexus: types and symptoms.
20. Branches of the median nerve.
21. Branches of the ulnar nerve.
22. Branches of the radial nerve.
23. Skin innervation of the upper limb.
24. Axillary fossa, triangular and quadrangular axillary spaces.
25. Sectional anatomy of the arm: fascial (osteofibrous) compartments, muscle groups, vessels and nerves. The cubital fossa.
26. Sectional anatomy of the forearm: fascial (osteofibrous) compartments, muscle groups, vessels and nerves.
27. Topography of the volar and dorsal wrist regions: tendons, tendon sheaths, osteofibrous compartments, vessels and nerves. The carpal tunnel.
28. Dorsum of the hand. The anatomical snuffbox (Foveola radialis).
29. Palm of the hand: muscles, fasciae, compartments, vessels and nerves.

II. ANATOMY OF THE LOWER LIMB

1. The hip bone, the sacrum, os coccygis.
2. The structure and diameters of the bony pelvis.
3. The joints and ligaments of the pelvis. The statics and radiological anatomy of the pelvis.
4. The hip joint: gross and radiological anatomy, movements and the participating muscles.
5. The femur, tibia, fibula. Connections between tibia and fibula.
6. The knee joint: gross and radiological anatomy, movements and participating muscles.
7. The ankle (talocrural) joint: gross and radiological anatomy, movements and participating muscles.

8. Anatomy of the intertarsal joints and surgical lines of the foot. Movements of the foot: participating muscles.
9. The anatomy of the foot arches. Radiological anatomy of the foot.
10. Arteries of the lower limb, anastomoses between the branches of the femoral artery.
11. Venous and lymphatic drainage of the lower limb; clinical significance of the perforating veins.
12. Branches of the lumbar plexus.
13. Branches of the sacral plexus. The branches of the tibial and common fibular (peroneal) nerves.
14. Sensory innervation of the skin of the lower limb.
15. Muscles of the hip. Supra- and infrapiriform foramina.
16. Subinguinal hiatus. Femoral canal.
17. Femoral triangle, adductor canal, popliteal fossa.
18. Sectional anatomy of the thigh: fascial (osteofibrous) compartments, muscle groups, vessels and nerves.
19. Sectional anatomy of the leg (crus): fascial (osteofibrous) compartments, muscle groups, vessels and nerves.
20. Topography of the medial and lateral malleolar regions.
21. Dorsum of the foot: muscles, fasciae, tendons, tendon sheaths, vessels and nerves.
22. Sole (planta) of the foot: muscles, tendons, fasciae, compartments, vessels and nerves.

III. BONES, JOINTS AND MUSCLES OF THE TRUNK

1. The bones and joints of the thorax. The movements of respiration.
2. The vertebral column: gross anatomy, syndesmology and X-ray anatomy.
3. The muscles of the thorax. The intercostal space.
4. The diaphragm.
5. The topography of the thoracic cavity, structure of the thoracic wall, the projection of the thoracic organs onto the surface.
6. The anatomy, blood supply and lymphatic drainage of the female breast.
7. The broad muscles of the abdominal wall; the rectus abdominis muscle and the rectus sheath.
8. The muscles of the posterior abdominal wall and the deep muscles of the back.
9. Hernial canals on the anterior and posterior abdominal wall.

IV. THE SKULL

1. The external base of the skull.
2. Anterior cranial fossa.
3. Middle cranial fossa.
4. Posterior cranial fossa.
5. The temporal bone.
6. The frontal bone. The ethmoid bone. Norma frontalis et lateralis: radiological anatomy of the skull.
7. The occipital and the parietal bones. Sutures and fontanelles.
8. The sphenoid bone.
9. The bony nasal cavity. The paranasal sinuses.
10. The mandible and the maxilla.
11. The orbit. The hard palate.
12. Functional anatomy of the temporomandibular joint.
13. Functional anatomy of the atlantooccipital and atlantoaxial joints.

V. CYTOMORPHOLOGY AND THE BASIC TISSUES

1. General description and types of epithelial tissue.
2. General description and types of connective tissue.
3. Types and structure of cartilage.
4. Structure of bone tissue: the cells and the extracellular matrix. Histogenesis of bone. Types of ossification.
5. General description and types of muscle tissue.
6. Light and electron microscopic structure of the neuron; electron microscopic structure of the interneuronal synapsis.
7. Light and electron microscopic structure of the glial cells.