FINAL EXAM ENTRY QUESTIONS IN ANATOMY, HISTOLOGY AND EMBRYOLOGY

OSTEOLOGY, SYNDESMOLOGY, MYOLOGY

1. Bones of the neurocranium
2. Bones of the viscerocranium
3. Norma frontalis (anterior aspect of the skull): identification of bony structures (picture)
4. Radiological anatomy of the hand – identification of the bones (picture)
5. Radiological anatomy of the shoulder – identification of the bones (picture)
6. Radiological anatomy of the pelvis – identification of the bones (picture)
7. Radiological anatomy of the foot – identification of the bones (picture)
8. Contents of the carpal tunnel
9. Ligaments of the hip joint
10. Ligaments of the knee joint
11. Ligaments of the ankle joint
12. Thenar muscles of the hand: list and innervation
13. Femoral triangle – borders, muscles and innervation
14. Anatomy (parts) of the subinguinal hiatus
15. Types of the uniaxial joints
16. Types of the biaxial joints
17. Types of the multiaxial joints
18. Types of the synarthroses
19. Flexor muscles of the forearm (anterior compartment)
20. Extensor muscles of the forearm (posterior compartment)
21. Adductors of the thigh (medial compartment)
22. Flexor muscle of the thigh (posterior compartment)
23. Extensor muscles of the thigh (anterior compartment)
24. The popliteal fossa: definition and contents
25. Identification of cervical, thoracic and lumbar vertebrae (differences, similarities)

SPLANCHNOLOGY

1. Layers of the thoracic wall
2. Surface projection of the apex of the heart
3. Postero-anterior radiograph of the thorax - contours of the heart and great vessels (identification on picture)
4. Heart valves – precise list
5. Impulse-generating and conducting system of the heart
6. Right coronary artery: branches and supply area
7. Left coronary artery: branches and supply area
8. Anatomy of the aorta
9. Branches of the aortic arch
10. Superior vena cava and its tributaries
11. Unpaired visceral branches of the abdominal aorta (main branches)
12. Paired visceral branches of the abdominal aorta
13. Parietal branches of the abdominal aorta
14. The major lymphatic vessels of the body
15. Paranasal sinuses and their precise opening into the nasal cavity
16. Frontal section of the larynx – identification of the structures
17. Innervation of laryngeal muscles (list)
18. Hilar structures of the lung (radix pulmonis)
19. Isthmus faucium: definition and structures
20. Large salivary glands: list of glands, precise opening sites and secretomotor innervation
21. Tonsils in the pharynx: list
22. Major openings of the diaphragm and structures passing through
23. Layers of the abdominal wall
25. Contents of the inguinal canal (male and female)
26. Regions of the abdominal cavity (definition with major planes)
27. Peritoneal relations of the abdominal organs
28. Anatomy and structures opening at the major duodenal papilla
29. Structures of the hilum of the liver (porta hepatis)
30. Branches of the celiac trunk
31. Anatomy of the extrahepatic bile ducts
32. Layers of the scrotum
33. Structures of the vulva
34. Anatomical parts of the uterine tube
35. Anatomical parts of the male urethra
36. Portal vein and its tributaries
37. Crossings of the ureter
38. Structures of the hilum of the kidney
39. Renal capsules (correct list)
40. Veins of the heart (list)

NEUROANATOMY, SENSE ORGANS

1. The superior orbital fissure and its contents
2. The internal acoustic meatus and its contents
3. Spinal cord reflex arc (anatomy of the spinal segment)
4. Cranial nerves and their exit sites on the skull
5. Identification of brain stem structures on MRI image
6. Vertebral level of the conus medullaris in neonates and in adults
7. Vertebral level of the lower end of the spinal dura mater
8. Anatomical definition of the circle of Willis (arteries)
9. Afferent and efferent limbs of the corneal- or blink reflex
10. Sympathetic innervation of the iris
11. Parasympathetic innervation of the iris (pupillary light reflex)
12. The walls of the tympanic cavity: precise list
13. Muscles innervated by the facial nerve: list
14. The masticatory muscles: list and innervation
15. Structures in the carotid sheath (vagina carotica)
16. Parasympathetic ganglia of the head
17. The dorsal column-medial lemniscus pathway: localization of neurons and synapses
18. Anatomy of the spinothalamic tract in the spinal cord: somatotopy and sensations
19. Neuroanatomical organisation of the spinal white matter (tracts on cross section)
20. List of the cranial nerves that control eye movements
21. Which cranial nerves carry parasympathetic fibers
22. Which cranial nerves carry only motor fibers
23. Which cranial nerves carry only sensory fibers
24. Magnocellular nuclei of the hypothalamus
25. Meninges of the brain and spinal cord: list
26. Spaces between the meninges of the brain and the spinal cord (list)
27. Parasympathetic nuclei of the brain stem
28. Name five subarachnoid cisterns
29. Roots of the trigeminal nerve and the site of exit from the skull
30. Norma frontalis – exit sites of the trigeminal nerve branches
31. Cerebrospinal fluid – secretion site and absorption structures
32. Brainstem nuclei of the oculomotor nerve
33. Brainstem nuclei of the trigeminal nerve
34. Brainstem nuclei of the facial nerve
35. Brainstem nuclei of the glossopharyngeal nerve
36. Brainstem nuclei of the vagus nerve
37. Internal capsule – localization of the tracts passing through
38. Topography of the internal capsule - identification of the internal capsule and related structures on MRI images
39. Ventricles of the brain: anatomy
40. Dural reflections: list
41. Brachial plexus: roots, trunks, division and cords (with spinal segmental content)

EMBRYOLOGY

1. Parts of the blastocyst
2. Type of the implantation of the human embryo
3. Layers of the placental barrier
4. Definition of the cotyledon
5. Anatomy of the normal placenta: weight, shape, size and surfaces
6. Definition of gastrulation
7. Definition of neurulation
8. Brain vesicles: names (3 vesicles’ stage)
9. Brain vesicles: names (5 vesicles’ stage)
10. Derivatives of the first, second and third pharyngeal pouches (entoderm)
11. Derivative of the first pharyngeal cleft (ectoderm)
12. Tooth enamel is from which germ layer ?
13. Vascular shunts in the fetal circulation
14. The Meckel's diverticulum is the remnant of what ?
15. Fetal membranes (list)
16. Parts of the decidua
17. Definition of the amnion
18. Definition of the chorion
19. Developmental stages of erythrocytes
20. Developmental remnants on the heart
21. Developmental remnants on the anterior abdominal wall (inner surface)
22. Developmental remnants on the visceral surface of the liver
23. Derivatives of the ectoderm
24. Derivatives of the mesoderm
25. Derivatives of the entoderm

HISTOLOGY

1. Stages of mitosis
2. Stages of meiosis
3. Layers of the stratified squamous keratinized epithelium
4. Electron microscopic structure of the glomerular filtration barrier in the kidney
5. Definition of endocrine, paracrine and autocrine secretion mechanisms
6. Definition of neurosecretion
7. Definition and electron microscopic structure of the blood-air barrier
8. Differentiation of granulocytes on pictures
9. Structure of the lymph node
10. Definition of the osteon
11. General structure (layers) of the wall of the gastrointestinal tract
12. Testis and epididymis – types of epithelia in their tubular systems
13. Epithelial covering of the male urethra according to the anatomical parts
14. Transmitter of the neuromuscular synapse
15. Types of the connective tissue fibers and their staining methods
16. Types of ossification
17. Zones of endochondral ossification
18. Morphology of a serous glandular acinus (picture)
19. Morphology of a mucous glandular acinus (picture)
20. Types of the capillaries (list)
21. Identification of capillary types on electron microscopic pictures
22. Elastic artery - structure of the arterial wall
23. Muscular artery - structure of the arterial wall
24. Types of white blood cells (pictures)
25. Morphology of the Graafian follicle (picture)
26. Parts and histology of the anal canal
27. Histology of the liver - picture identification (light microscopy)
28. Histology of the lung - picture identification (light microscopy)
29. Histology of the kidney - picture identification (light microscopy)
30. Histology of the testis - picture identification (light microscopy)
31. Histology of the thyroid gland - picture identification (light microscopy)
32. Parts of the nephron: list
33. Cellular components of the juxtaglomerular apparatus
34. Layers of the retina
35. Layers of the cerebellar cortex
36. Layers of the skin
37. Cell types of the fundic glands of the stomach, list of secreted products
38. Histology of the suprarenal gland - picture identification
39. Histology of the lymph node - picture identification
40. Electron microscopic structure of the skeletal muscle - picture identification