

Exam Topics/Subtopics

In Human Anatomy

for the Faculty of Physical medicine and Rehabilitation

Topics for each semester:

Semester I – N1 – N158

Semester II – N 159- N 453

- 1) Anatomical Position
- 2) Subject and goals of Anatomy
- 3) Saggital plane – location, function
- 4) Frontal plane – location, function
- 5) Horizontal plane – location, function
- 6) Anatomical axes and their directions
- 7) General anatomical terminology
- 8) Axial skeleton and its parts
- 9) Appendicular skeleton and its parts
- 10) Vertebral column- regions and amounts of vertebrae in each region
- 11) Parts of the typical vertebra
- 12) Cervical vertebrae and their differences from the typical vertebra
- 13) Anatomy of C1 and C2
- 14) Anatomy of the sacral bone
- 15) Lumbar vertebrae – individual characteristics
- 16) Vertebral canal – formation, contents
- 17) Thoracic skeleton and its parts
- 18) Sternum – parts, connections
- 19) General anatomy of the rib
- 20) True ribs and their connections
- 21) False ribs and their connections
- 22) Fluctuant ribs and their connections

- 23) Bones of the upper limb – general division
- 24) Anatomy of the humerus
- 25) Anatomy of the radius
- 26) Anatomy of the ulna
- 27) Hand skeleton
- 28) Bones of the lower limb – general division
- 29) Parts of the hip bone
- 30) Anatomy of the femur
- 31) Anatomy of the tibia
- 32) Anatomy of the fibula
- 33) Foot skeleton
- 34) General division of the skull – neurocranium , viscerocranium
- 35) Processes of the maxilla and their anatomical structures
- 36) Body of maxilla and its surfaces
- 37) Maxillary sinus and its connection to the nasal cavity
- 38) Body of the mandible and its structures
- 39) Mandibular rami and processes
- 40) Mandibular angle and its tuberosities
- 41) Palatine bone – perpendicular and horizontal planes, pyramidal process
- 42) Nasal bone, vomer, inferior nasal concha
- 43) Zygomatic bone – general anatomy
- 44) Zygomatic bone – surfaces and their foramina
- 45) Frontal bone – general anatomical parts
- 46) General anatomy of the sphenoid bone
- 47) Foramina on the greater wing – rotundum, ovale, spinosum
- 48) Superior orbital fissure – location, function
- 49) General anatomy of the occipital bone
- 50) Occipital squama – surfaces, margins
- 51) General anatomy of the temporal bone
- 52) Anterior surface of the petrous part and its anatomical structures
- 53) Posterior surface of the petrous part and its anatomical structures
- 54) Inferior surface of the petrous part and its anatomical structures
- 55) Styloid and mastoid processes and stylomastoid foramen
- 56) Ethmoid bone and its anatomical parts
- 57) Parietal bone – surfaces, margins, angles

- 58) Infratemporal and sphenopalatine fossae – borders, contents, connections
- 59) Orbit – walls, connections
- 60) Nasal cavity – walls, meatuses, connections
- 61) Anterior cranial fossa – boundaries, connections
- 62) Foramen lacerum – location, function
- 63) Middle cranial fossa – boundaries, connections
- 64) Jugular foramen – location, function
- 65) Posterior cranial fossa – boundaries, connections
- 66) General classification of connections
- 67) Uni, bi and multiaxial joints
- 68) Essential elements of the synovial joint
- 69) Additional elements of the synovial joint
- 70) Intervertebral disc
- 71) Long vertebral ligaments
- 72) Short vertebral ligament
- 73) Joints of the vertebral column
- 74) Connections of the thorax
- 75) Cranial sutures and ligaments
- 76) Anatomy of the temporomandibular joint
- 77) Connections of the clavicle – sternoclavicular and acromioclavicular joints
- 78) Shoulder joint – anatomical type, additional element, ligaments
- 79) Elbow joint – parts, ligaments
- 80) Radiocarpal joint – formation, anatomical type, ligaments
- 81) Anatomy of the sacroiliac joint
- 82) Hip joint – formation, anatomical type, additional elements, ligaments
- 83) Anatomy of the knee joint
- 84) Talocrural joint – formation, anatomical type, ligaments
- 85) Anatomical classification of muscles
- 86) Parts of the skeletal muscle - head, venter, tail
- 87) Head muscles – neurocranial and facial muscles
- 88) Masseter m. – Origin and insertion sites, functions
- 89) Temporal m. – Origin and insertion sites, functions
- 90) Medial pterygoid m. – Origin and insertion sites, functions
- 91) Lateral pterygoid m. – Origin and insertion sites, functions
- 92) Muscles of the facial expression

- 93) Superficial neck muscles
- 94) Suprahyoid muscles
- 95) Infrahyoid muscles
- 96) Superficial back muscles
- 97) Anterior abdominal muscles
- 98) Lateral abdominal muscles
- 99) Posterior abdominal muscles
- 100) Classification of the thoracic muscles
- 101) Diaphragm- parts, foramina and their locations
- 102) General classification of the perineal muscles
- 103) General classification of the upper limb muscles
- 104) General division of the arm muscles – flexors, extensors
- 105) Biceps brachii m. - Origin and insertion sites, functions
- 106) Coracobrachialis m. - Origin and insertion sites, functions
- 107) Brachialis m. - Origin and insertion sites, functions
- 108) Triceps brachii m. - Origin and insertion sites, functions
- 109) Anconeus m. - Origin and insertion sites, functions
- 110) Flexor carpi radialis m. - Origin and insertion sites, functions
- 111) Flexor carpi ulnaris m. - Origin and insertion sites, functions
- 112) Flexor digitorum superficialis m. - Origin and insertion sites, functions
- 113) Flexor digitorum profundus m. - Origin and insertion sites, functions
- 114) Flexor pollicis longus m. - Origin and insertion sites, functions
- 115) Pronator teres m. - Origin and insertion sites, functions
- 116) Pronator quadratus m. - Origin and insertion sites, functions
- 117) Supinator m. - Origin and insertion sites, functions
- 118) Extensor digitorum m. - Origin and insertion sites, functions
- 119) Extensor carpi radialis longus m. - Origin and insertion sites, functions
- 120) Extensor carpi radialis brevis m. - Origin and insertion sites, functions
- 121) Brachioradialis m. - Origin and insertion sites, functions
- 122) Extensor pollicis longus and brevis mm. - Origin and insertion sites, functions
- 123) Abductor pollicis longus m. - Origin and insertion sites, functions
- 124) Thenar muscles – names, functions
- 125) Hypothenar muscles – names, functions
- 126) Interossei and lumbricals, their functions
- 127) Movements in the arm joint

- 128) Movements in the elbow joint
- 129) Movements in the radiocarpal joint
- 130) General classification of the lower limb muscles
- 131) Internal pelvic mm. - Origin and insertion sites, functions
- 132) External pelvic mm. - Origin and insertion sites, functions
- 133) Quadriceps femoris m. - Origin and insertion sites, functions
- 134) Sartorius m. - Origin and insertion sites, functions
- 135) Biceps femoris m. - Origin and insertion sites, functions
- 136) Semitendinosus m. - Origin and insertion sites, functions
- 137) Semimebranosus m. - Origin and insertion sites, functions
- 138) Tibialis anterior m. - Origin and insertion sites, functions
- 139) Extensor digitorum longus m. - Origin and insertion sites, functions
- 140) Extensor hallucis longus m. - Origin and insertion sites, functions
- 141) Tibialis posterior m. - Origin and insertion sites, functions
- 142) Flexor hallucis longus m. - Origin and insertion sites, functions
- 143) Flexor digitorum longus m. - Origin and insertion sites, functions
- 144) Gastrocnemius m. - Origin and insertion sites, functions
- 145) Soleus m. - Origin and insertion sites, functions
- 146) Triceps surae m. - parts, Achilles tendon
- 147) Plantaris m. - Origin and insertion sites, functions
- 148) Popliteal m. - Origin and insertion sites, functions
- 149) Fibularis longus m. - Origin and insertion sites, functions
- 150) Fibularis brevis m. - Origin and insertion sites, functions
- 151) Dorsal compartment of the foot – names and functions of muscles
- 152) Medial plantar compartment of the foot – names and functions of muscles
- 153) Lateral plantar compartment of the foot – names and functions of muscles
- 154) Central plantar compartment of the foot – names and functions of muscles
- 155) Lumbricals and interossei muscles of the foot, their functions
- 156) Movements in the hip joint
- 157) Movements in the knee joint
- 158) Movements in the talocrural joint
- 159) General discription of the digestive system
- 160) General structure of the GI tract's wall
- 161) Foregut derivatives
- 162) Midgut derivativse

- 163) Hindgut derivatives
- 164) Oral fissure – boundaries, location
- 165) Parts of the upper lip
- 166) Oral vestibule – boundaries, location, function
- 167) Cheeks – general structure, zones, functions
- 168) Gums – structure, parts, location
- 169) Walls of the proper oral cavity
- 170) Hard palate – bony composition, mucosa
- 171) Muscles of the soft palate
- 172) Tongue – parts, surfaces, margins
- 173) Tongue – grooves, foramen cecum
- 174) Taste buds on the tongue
- 175) Intrinsic lingual muscles
- 176) Extrinsic lingual muscles
- 177) Tooth – general anatomy, organ of the tooth
- 178) Surfaces of the crown of tooth
- 179) Groups of teeth, their individual characteristics
- 180) Lacteal and permanent teeth
- 181) Incisors – amount, general anatomy
- 182) Canines – amount, general anatomy
- 183) Premolars – amount, general anatomy
- 184) Molars – amount, general anatomy
- 185) Root and tubercles sign
- 186) Amount of roots for each group of teeth
- 187) Anatomy of the pharynx – parts, openings, muscles
- 188) Esophagus – parts, constrictions, wall
- 189) Stomach – parts, ligaments, wall
- 190) Duodenum – parts, wall
- 191) Jejunum and ileum
- 192) Large intestine – parts, wall of the colon
- 193) Anatomy of the rectum
- 194) Parotid gland – location, parts
- 195) Relations of the parotid gland
- 196) Parotid duct and its opening
- 197) Submandibular gland – location, relations, duct and its opening site

- 198) Sublingual gland – location, relations, main and accessory ducts and their opening site
- 199) Liver – surfaces, lobes, ligaments
- 200) Anatomy of the gallbladder and billiary tree
- 201) Pancreas – parts, ducts
- 202) General anatomy of the peritoneum, visceral and parietal layers of peritoneum, peritoneal cavity
- 203) Intraperitoneal organs
- 204) Mesoperitoneal organs
- 205) Retroperitoneal organs
- 206) Mesentery and omentum
- 207) Cartilages of the external nose
- 208) Walls of the nasal cavity
- 209) Superior nasal meatus and its openings
- 210) Middle nasal meatus and its openings
- 211) Inferior nasal meatus and its openings
- 212) Maxillary sinus – walls, hiatus
- 213) Sphenoid sinus – walls, connection to the nasal cavity
- 214) Ethmoid cells – groups, their connection to the nasal cavity
- 215) Frontal sinus – walls, connection to the nasal cavity
- 216) Paired laryngeal cartilages
- 217) Single laryngeal cartilages
- 218) Laryngeal dilator muscles
- 219) Laryngeal constrictor muscles
- 220) Vocal muscles
- 221) Laryngeal cavity
- 222) Trachea – parts, wall, bifurcation site
- 223) Differences between right and left main bronchi
- 224) Elements of the bronchial tree
- 225) Lungs – surfaces, margins, pulmonary hilum, lobes and segments
- 226) Pleura – layers, pleural cavity
- 227) General division of the mediastinum
- 228) External anatomy of the kidney – surfaces, poles, margins
- 229) Renal hilum and its structures
- 230) Renal parenchyma – cortex, medulla

- 231) Calices and renal pelvis
- 232) Renal blood flow – renal artery and its branches
- 233) Nephron and its parts
- 234) Ureter – parts, constrictions
- 235) Urinary bladder – parts, wall
- 236) External anatomy of the testis – surfaces, poles, margins
- 237) Tubular system of the testis
- 238) Vas deferens and its connection to the excretory duct
- 239) Scrotum and its 7 layers
- 240) Prostate gland – location, parts, parenchyma
- 241) Male urethra - parts, dilations, sphincters
- 242) Cavernous and spongy bodies of the penis
- 243) External anatomy of the ovary – surfaces, poles, margins
- 244) Ovarian parenchyma – medulla, cortex
- 245) Fixating apparatus of the ovary
- 246) Uterus – parts, surfaces, margins
- 247) Wall of the uterus
- 248) Ligaments of the uterus
- 249) Fallopian tube – parts, wall
- 250) Vagina – wall, fornix
- 251) External female genitalia – labia majora, labia minora, mammary gland and clitoris
- 252) General characteristics of the endocrine system
- 253) Endodermal glands
- 254) Mesodermal glands
- 255) Ectodermal glands
- 256) Central and peripheral endocrine organs
- 257) Pituitary dependent organs
- 258) Pituitary independent organs
- 259) Hypothalamus – location, nuclei, functions
- 260) Pituitary gland – parts, location
- 261) Epiphysis – location, function
- 262) Thyroid gland – parts, hormones
- 263) Parathyroid glands – location, function
- 264) Adrenal medulla and its hormones

- 265) Adrenal cortex – zones, hormones
- 266) Gonads and their endocrine functions
- 267) Hormone producing cells in some nonendocrine organs
- 268) Hormone producing cells in some nonendocrine organs
- 269) Fibrous layer of the eyeball – parts, functions
- 270) Vasculous layer of the eyeball – parts, functions
- 271) Iris – muscles, pupil, iridocorneal angle
- 272) Retinal layer of the eyeball – parts, functions
- 273) Eyeball chambers, aqueous humor
- 274) Extraocular muscles
- 275) Lacrimal apparatus
- 276) General division of the ear – external, middle and internal parts
- 277) Auditory ossicles
- 278) Tympanic cavity and its walls
- 279) Bony semicircular canals
- 280) Cochlea and its anatomy
- 281) Vestibule and its anatomy
- 282) Membranous labyrinth and its parts
- 283) Layers of the skin
- 284) Heart – location, external anatomy
- 285) Posterior wall of the right atrium
- 286) Anterior wall of the right atrium
- 287) Interatrial septum and its anatomy
- 288) Anatomy of the tricuspid valve
- 289) Walls of the right ventricle
- 290) Walls of the left atrium
- 291) Walls of the left ventricle
- 292) Anatomy of the mitral valve
- 293) Anatomy of the pulmonary valve
- 294) Anatomy of the aortic valve
- 295) Endocardium – location, function
- 296) Atrial myocardium and its layers
- 297) Ventricular myocardium and its layers
- 298) Anatomy of the pericardium
- 299) Heart conducting system

- 300) Right coronary artery and its branches
- 301) Left coronary artery and its branches
- 302) Pulmonary trunk and its bifurcation site, pulmonary arteries and veins
- 303) Aorta and its parts
- 304) Aortic arch – origin and termination levels, branches of the aortic arch
- 305) Common carotid artery – origin, bifurcation site
- 306) General branches of the external carotid artery
- 307) Superior thyroid artery and its branches
- 308) Lingual artery and its branches
- 309) Facial artery and its branches
- 310) Posterior auricular artery and its branches
- 311) Occipital artery and its branches
- 312) Ascending pharyngeal artery and its branches
- 313) Superficial temporal artery and its branches
- 314) First part of the maxillary artery and its branches
- 315) Second part of the maxillary artery and its branches
- 316) Third part of the maxillary artery and its branches
- 317) Ophthalmic artery and its branches
- 318) Circle of Willis
- 319) Parts of the subclavian artery
- 320) Thyrocervical trunk and its branches
- 321) Costocervical trunk and its branches
- 322) Axillary artery and its branches
- 323) Brachial artery and its branches
- 324) Radial artery and its branches
- 325) Ulnar artery and its branches
- 326) Deep palmar arch – formation, branches
- 327) Superficial palmar arch – formation, branches
- 328) Visceral branches of the thoracic aorta
- 329) Parietal branches of the thoracic aorta
- 330) Parietal branches of the abdominal aorta
- 331) Paired visceral branches of the abdominal aorta
- 332) Celiac trunk – origin level, branches
- 333) Superior mesenteric artery – origin level, branches
- 334) Inferior mesenteric artery – origin level, branches

- 335) External iliac artery and its branches
- 336) Parietal branches of the internal iliac artery
- 337) Visceral branches of the internal iliac artery
- 338) Femoral artery and its branches
- 339) Popliteal artery and its branches
- 340) Anterior tibial artery and its branches
- 341) Posterior tibial artery and its branches
- 342) Deep and superficial veins of the lower limb
- 343) Pelvic veins
- 344) Inferior vena cava – formation, parietal and visceral tributaries
- 345) Portal vein and its tributaries
- 346) Superior portocaval anastomosis
- 347) Inferior portocaval anastomosis
- 348) Cavacaval anastomoses
- 349) Deep and superficial veins of the upper limb
- 350) Brachiocephalic vein and its tributaries
- 351) Superior vena cava – formation, tributaries
- 352) Azygos vein – formation, tributaries
- 353) Hemiazygos vein – formation, tributaries
- 354) Internal jugular vein – formation, tributaries
- 355) External jugular vein – formation, tributaries
- 356) Ophthalmic veins
- 357) Facial vein – formation, tributaries
- 358) Retromandibular vein – formation, tributaries
- 359) Maxillary and lingual veins
- 360) Pterygoid venous plexus
- 361) Prenatal circulation
- 362) Postnatal circulation
- 363) Lymphatic trunks and ducts
- 364) Immune system organs – bone marrow, lymph node, thymus, tonsils
- 365) Anatomy of the spleen
- 366) Development of the nervous system – main stages
- 367) Spinal cord – location, borders
- 368) External anatomy of the spinal cord – grooves, fissure, funiculi
- 369) Gray matter – anterior, posterior and lateral horns

- 370) Meninges and intermeningeal spaces
- 371) White matter of the spinal cord
- 372) General branches of the spinal nerve
- 373) Borders between the spinal cord and brain
- 374) Three primary vesicles of the brain
- 375) Five secondary vesicles of the brain
- 376) External anatomy of the medulla oblongata
- 377) Gray substance of the medulla, medullary nuclei
- 378) White substance of the medulla
- 379) Brainstem and its parts
- 380) External anatomy of the pons
- 381) Gray and white matter of the pons, pontine nuclei
- 382) Cerebellum – parts, pedicles, nuclei
- 383) IV ventricle – floor, roof, connections
- 384) Midbrain – parts, connections
- 385) Internal anatomy of the midbrain
- 386) Diencephalon – parts, functions
- 387) Ventricles of the brain and their connections
- 388) Cerebral hemispheres – surfaces, lobes, grooves, poles
- 389) Sulci and gyri of the frontal lobe
- 390) Sulci and gyri of the temporal lobe
- 391) Sulci and gyri of the parietal lobe
- 392) Sulci and gyri of the occipital lobe
- 393) Sulci and gyri of the insular lobe
- 394) Cerebral cortex and its layers, main cortical areas
- 395) Basal ganglia
- 396) White substance of hemispheres
- 397) Meninges, dural venous sinuses
- 398) Connections between the right and left hemispheres
- 399) Cervical plexus – formation, general branches
- 400) General anatomy of the brachial plexus
- 401) Short branches of the brachial plexus
- 402) Ulnar nerve and its branches
- 403) Radial nerve and its branches
- 404) Median nerve and its branches

- 405) Musculocutaneous nerve and its branches
- 406) Innervation of the hand
- 407) Sensory innervation of the upper limb
- 408) Intercostal nerves and their branches
- 409) General anatomy of the lumbar plexus
- 410) Short branches of the lumbar plexus
- 411) Femoral nerve and its branches
- 412) Lateral cutaneous nerve of the thigh
- 413) Obturator nerve and its branches
- 414) General anatomy of the sacral plexus
- 415) Short branches of the sacral plexus
- 416) Sciatic nerve and its branches
- 417) Tibial nerve and its branches
- 418) Common fibular nerve and its branches
- 419) Sural nerve and its formation
- 420) Superficial fibular nerve and its branches
- 421) Deep fibular nerve and its branches
- 422) General anatomy of cranial nerves – names, foramen in the skull for each
nerve
- 423) Olfactory nerve – pathway neurons
- 424) Optic nerve – pathway, neurons, optic chiasm
- 425) Oculomotor nerve and its branches
- 426) Trochlear nerve
- 427) Trigeminal nerve – nuclei, ganglion
- 428) Maxillary nerve and its branches
- 429) Maxillary nerve and autonomic ganglia
- 430) Mandibular nerve and its branches
- 431) Mandibular nerve and autonomic ganglia
- 432) Ophthalmic nerve and its branches
- 433) Abducence nerve
- 434) Nuclei of the facial nerve
- 435) Branches of the facial nerve inside the facial nerve canal
- 436) Facial nerve and its motor branches
- 437) Vestibulocochlear nerve
- 438) Glossopharyngeal nerve and its branches

- 439) Vagus nerve – segments, nuclei, branches
- 440) Accessory nerve
- 441) Hypoglossal nerve
- 442) Effects of sympathetic and parasympathetic nervous systems
- 443) Differences between the autonomic and somatic nervous systems
- 444) Autonomic centers in the CNS
- 445) Sympathetic trunk – formation, regions
- 446) Cranial parasympathetic nuclei and nerves
- 447) Sacral parasympathetic segments and nerves
- 448) Celiac ganglion and its branches
- 449) Superior mesenteric ganglion and its branches
- 450) Inferior mesenteric ganglion and its branches
- 451) Superior and inferior hypogastric plexuses
- 452) Afferent tracts
- 453) Efferent tracts

