Group B: Organ systems (digestive, respiratory, urinary, genital system, heart, glands and skin) – green

Digestive system

1. Teeth

- <u>Main points</u>: external and internal structure of a tooth, fixation of a tooth in jaw, tooth types, dental formula and tooth eruption, development and developmental defects
- <u>Figures:</u> dental formula of the deciduous and the permanent teeth, longitudinal section of a tooth

2. Tongue and palate

- <u>Main points:</u> parts, surfaces, structures, composition, development and developmental defects, muscles, innervation and vascular supply of the tongue, development, structure of the hard and soft palate, muscles, innervation and vascular supply of the soft palate, palatine tonsil
- Figures: somatosensory and gustatory innervation of the tongue, lingual papillae

3. Salivary glands

- <u>Main points:</u> types of glands, structure, development and developmental defects, syntopy and innervation of major salivary glands
- <u>Figures:</u> parotid gland and parotid duct, schema of the internal structure of a salivary gland

4. Pharynx

- <u>Main points:</u> general structure of the wall of the digestive tube, division and communications, wall structure, development and developmental defects, syntopy, muscles, innervation, vascular supply and spaces around the pharynx
- <u>Figures:</u> sagittal section of the pharynx, lateral view of the pharyngeal muscles, transverse section of the neck at the level of C6

5. Oesophagus

- <u>Main points</u>: general structure of the wall of the digestive tube, structure, development and developmental defects, parts, syntopy, curvatures, constrictions, innervation and vascular supply, thinned spots of the wall (Killian's and Laimer's triangle), closure of the aboral oesophageal orifice
- <u>Figures:</u> parts, curvatures and constrictions of the oesophagus, transverse section of the neck at the level of C6, diaphragm

6. Stomach and omental bursa

 Main points: general structure of the wall of the digestive tube, parts, structure, development and developmental defects, syntopy, mesenteries, innervation, vascular supply, projection of the stomach on the anterior abdominal wall,

- closure of the aboral oesophageal and cardiac orifice; boundaries and recesses of the omental bursa, contents of the hepatoduodenal ligament
- Figures: parts, vascular supply and syntopy of the stomach, cells of gastric glands

7. Duodenum

- <u>Main points</u>: general structure of the wall of the digestive tube, parts, structure, development and developmental defects, syntopy, fixation, vascular supply and innervation; extrahepatic bile ducts
- <u>Figures</u>: duodenum, pancreas, extrahepatic bile ducts, structure of an intestinal wall

8. Small intestine

- <u>Main points:</u> general structure of the wall of the digestive tube, parts, structure, development and developmental defects, syntopy, fixation, vascular supply and innervation, differences between jejunum and ileum
- Figures: vascular supply of the small intestine, structure of an intestinal gland

9. Large intestine

- Main points: general structure of the wall of the digestive tube, parts, structure, development and developmental defects, syntopy, innervation and vascular supply, positions of vermiform appendix, relationship to peritoneum
- Figures: parts of the large intestine and their vascular supply, paracolic spaces

10. Rectum

- Main points: general structure of the wall of the digestive tube, parts, flexures, muscles, structure, development and developmental defects, syntopy, innervation and vascular supply, function; pelvic floor, mechanism of defecation, anal triangle
- <u>Figures:</u> frontal and sagittal section of the rectum, sagittal section of the male and female pelvis

11. Liver

- <u>Main points:</u> parts, external and internal structure, development and developmental defects, mesenteries, function, syntopy and vascular supply; intrahepatic bile ducts
- Figures: syntopy of the liver (visceral surface), hepatic lobule

12. Gallbladder and bile ducts

- <u>Main points:</u> general structure of the wall of the digestive tube, intrahepatic and extrahepatic bile ducts – parts and their course, structure of the gallbladder and bile ducts, development and developmental defects, hepatoduodenal ligament, bile production
- <u>Figures:</u> extrahepatic bile ducts, hepatoduodenal ligament

13. Pancreas

- <u>Main points:</u> parts, ducts, syntopy and vascular supply, function of the exocrine and endocrine part, structure, development and developmental defects
- <u>Figures:</u> duodenum and pancreas, extrahepatic bile ducts, vascular supply of the pancreas

14. Peritoneum and peritoneal cavity

- Main points: divisions of the peritoneal cavity, organs, mesenteries, omenta, recesses, spaces and vascular supply, structure, development of coelomic cavity and its division, developmental defects
- <u>Figures:</u> organs and mesenteries, sagittal section of the peritoneal cavity, male and femal pelvis

Respiratory system

15. External nose, nasal cavity, paranasal sinuses and nasopharynx

- <u>Main points:</u> structure and development of the nose; parts, boundaries and syntopy of the nasal cavity; list and drainage of the paranasal sinuses, structures of the nasopharynx, innervation and vascular supply, developmental defects
- Figures: section of the nasal cavity, drainage of the paranasal sinuses

16. Larynx

- <u>Main points:</u> structure (cartilages, ligaments, joints and muscles) and development, laryngeal cavity, syntopy, vascular supply and innervation, developmental defects
- Figures: laryngoscopic view of the glottis, frontal section of the larynx

17. Trachea and bronchial tree

- <u>Main points:</u> general structure and differences of the structure of the larynx, bronchi and bronchioles syntopy, vascular supply and innervation, development and developmental defects, branching of the bronchial tree (subsegments of lung parenchyma), tracheotomy, bronchoscopy
- Figures: bronchial tree, transverse section of the trachea

18. Lungs and alveolar tree

- Main points: parts, surfaces, margins and syntopy of the lungs; lobes and bronchopulmonary segments, syntopy; contents of the lung hilum, lung structure, development, developmental stages and developmental defects, vascular supply, innervation and lymphatic drainage, fetal circulation
- <u>Figures:</u> bronchopulmonary segments, structures in the hilum of the lung, alveolar-capillary membrane

19. Pleura and pleural cavity

- <u>Main points:</u> parts, recesses, syntopy, vascular supply, innervation, borders and projection of the pleura, definition of the pneumothorax, structure, division, development and developmental defects of the coelomic cavity
- Figures: parts, recesses, borders and projection of the pleura

20. Mediastinum: division and content

- <u>Main points:</u> divisions, boundaries and content, development and developmental defects of individual components
- Figures: transversal section of thorax at the T2 (T3) level

Urinary system

21. Kidney

- <u>Main points:</u> covers, external and internal structure, segments, syntopy, vascular supply and innervation of the kidneys; renal corpuscle, nephron and its parts, juxtaglomerular apparatus, development and developmental stages, shape variations and developmental defects
- <u>Figures:</u> syntopy of the kidneys, transverse section of abdomen at the L1 level, filtration membrane

22. Urinary tract

- Main points: general structure, intrarenal and extrarenal parts, syntopy of the renal pelvis, parts and course of the ureter, parts and syntopy of the urinary bladder, vascular supply and innervation of all urinary tracts, development and developmental defects, dynamics of micturition
- <u>Figures:</u> course and crossing of the ureter with other structures, sagittal section of the male and female pelvis

23. Male and female urethra

- Main points: general structure, parts, curvatures, constricted and dilated segments and muscles of the male urethra, parts and muscles of the female urethra, developmental differences of the male and female urethrae, developmental defects, dynamics of micturition
- <u>Figures:</u> constricted and dilated segments of the male urethra, course and crossing of the ureter with other structures, sagittal section of the male and female pelvis

Genital system

24. Scrotum, testis and epididymis

 <u>Main points:</u> structure, cells, spermiogenesis, development and developmental defects innervation and vascular supply, function, descent of testis, layers of the scrotum • Figures: layers of the scrotum, structure of a sperm

25. Excretory male urinary tract

- Main points: general structure of the excretory male urinary tract, development
 and developmental defects, parts, course and structure of the ductus deferens;
 syntopy and duct of the seminal glands; external and internal structure and
 syntopy of the prostate, vascular supply and innervation, mechanism of
 ejaculation
- Figures: parts of the ductus deferens, transversal section of the prostate

26. Accessory male genital glands

- Main points: general structure, development and developmental defects; external and internal structure, syntopy and ducts of the seminal glands; external and internal structure and syntopy of the prostate; bulbo-urethral glands; vascular supply and innervation, pelvic floor
- Figures: transversal section of the prostate, sagittal section of the male pelvis

27. External male genital organs

- <u>Main points:</u> external and internal structure, development and developmental defects, vascular supply and innervation, muscles of urogenital floor, mechanism of erection and ejaculation
- <u>Figures:</u> transverse section of the penis, sagittal section of the male pelvis, inferior view of perineal region

28. Ovarium and ovarian cycle

- <u>Main points:</u> parts, structure, development and developmental defects, cells, oogenesis, fixation, vascular supply and innervation, ovarian cycle, stages of follicle, corpus rubrum, corpus luteum, corpus albicans
- Figures: vascular supply of the ovary and uterine tube, stages of ovarian follicles

29. Uterine tube

- Main points: general structure of the female genital tract, parts, structure, development and developmental defects, fixation, vascular supply and innervation, fertilization
- Figures: parts of the uterine tube, vascular supply of the ovary and uterine tube

30. Uterus and menstruation cycle

- Main points: general structure of the female genital tract, external and internal structure, development and developmental defects, surfaces and position, supporting apparatus, peritoneal folds, vascular supply and innervation, menstruation cycle
- <u>Figures:</u> sagittal section of female pelvis, parts of the uterus, broad ligament of uterus

31. Placenta and fetal membranes

• <u>Main points:</u> development and developmental defects, external and internal structure, chorionic villi, blood circulation, chorion, amnion, umbilical cord

• Figures: development of placenta, placental barrier

32. Vagina

- <u>Main points:</u> general structure of the female genital tract, external and internal structure, development and developmental defects, pelvic floor, syntopy, vascular supply and innervation, menstruation cycle
- Figures: sagittal section of female pelvis

33. External female genital organs

- Main points: external and internal structure, development and developmental defects, vascular supply and innervation of organs, muscles of urogenital floor, mechanism of erection
- <u>Figures:</u> transverse section of the body of the clitoris, sagittal section of female pelvis, inferior view of perineal region

Heart

34. Heart – structure, chambers, valves

- Main points: heart chambers and valves, parts and function of the cardiac skeleton, fetal and adult blood circulation, heart wall, auscultation sites of the heart valves, development (cardiac tube and loop) and developmental defects of the heart
- Figures: transverse section of the heart with vascular supply

35. Conducting system of the heart

- <u>Main points:</u> parts, layers of the heart wall, cardiac muscles, cardiac skeleton, development and developmental defects of the heart ,relationship to heart block
- Figures: scheme of the conducting system of the heart, intercalated disc

36. Heart - vessels and innervation

- <u>Main points:</u> topography of the heart in the pericardium, internal structure, development and developmental defects of the heart, projection of the heart, auscultation sites of the heart valves, vascular supply, innervation, conducting system of the heart
- <u>Figures:</u> transverse section of the heart with vascular supply; scheme of the coronary arteries, projection of the heart, auscultation sites of the heart valves

37. Heart and circulation

- Main points: structures and openings in the chambers, pulmonary circulation, fetal circulation, development (septation) and developmental defects of the heart
- Figures: basic structures in the right atrium, fetal circulation

Others

38. Thyroid and parathyroid glands

- <u>Main points:</u> structure, syntopy, vascular supply and innervation of the glands, surgical approaches, function and hormones, development and developmental defects
- Figures: transverse section of the neck at the C6 level

39. Suprarenal gland and other hormone-producing organs

- <u>Main points:</u> structure, shape, syntopy, vascular supply and innervation, function and hormones, development and developmental defects; list of the other hormone-producing organs and their hormones (pancreas, kidneys, heart, ovaries, corpus luteum, placenta, testes)
- Figures: transverse section of the abdomen at the L1 level

40. Pituitary gland

- <u>Main points:</u> structure, parts, shape, syntopy, vascular supply and innervation, function and hormones, development and developmental defects, hypothalamichypophysial axis
- Figures: section of pituitary gland

41. Mammary gland

- <u>Main points:</u> position, structure, development and developmental defects, syntopy, vascular supply and innervation
- <u>Figures:</u> sagittal section of the breast, lymphatic drainage

42. Skin

- Main points: function, parts, layers, development and developmental defects, cells, derivates (glands, hairs, nails), receptors and their function
- Figures: section of the skin

43. Second week of development

- <u>Main points:</u> formation of the bilaminar germ disc, development of extraembryonic cavities, embryonic implantation
- Figures: bilaminar germ disc with cavities

44. Third week of development

- <u>Main points:</u> formation of the trilaminar germ disc, differentiation of intraembryonic mesoderm, notogenesis
- Figures: gastrulation and differentiation of the intraembryonic mesoderm