I. General Pathology

 1. Biopsy: techniques of obtaining tissue samples, various kindsŤ

 of bioptical specimens, tissue processing, frozen sections

 2. Cytology: techniques of obtaining tissue samples, variousŤ

 kinds of cytological specimens

 3. Autopsy, its importance, the autopsy protocol and its parts

 4. Histological methods, stainings, light and electronŤ

 microscopy, histochemistry, immunohistochemistry and otherŤ

 special techniques

 5. Disease and its causes

 6. Death and postmortal changes

 7. Necrosis - types, causes and further evolution

 8. Atrophy - types, causes and further evolution

 9. Intracellular accumulations of lipids, proteins andŤ

 carbohydrates, single-gene inborn disorders

 10. Amyloidosis

 11. Pigments and pigmentations

 12. Icterus

 13. Pathologic calcifications, stones

 14. Pathology of nutrition

 15. Hypertrophy, hyperplasia

 16. Regeneration, reparation

 17. Metaplasia, dysplasia

 18. Edema

 19. Hyperemia, venostasis

 20. Focal disorders of blood supply, ischemia, infarction

 21. Haemorrhage

 22. Thrombosis incl. DIC

 23. Embolisation, metastasis

 24. Shock

 25. Heart failure - types, causes, complications

 26. Causes of inflammation

 27. Pathophysiology of inflammation

 28. Inflammation - microscopic and macroscopic changes

 29. Classification and morphologic patterns of inflammation

 30. Specific granulomatous inflammation and its examples (leprosy,Ť

 sarcoidosis, rhinoscleroma, etc.)

 31. Tuberculosis: general morphology

 32. Tuberculosis: preimmune type

 33. Tuberculosis: organ tuberculosis of adult type

 34. Syphilis

 35. Immune system and its functions

 36. Immune reactions

 37. Transplantation

 38. Primary and secondary immunodeficiency

 39. Autoimmune diseases

 40. HIV, AIDS

 41. Mechanisms of bacteria and virus-induced injury

 42. Bacteriemia, sepsis, pyemia

 43. Skin infections

 44. Respiratory system infections

 45. Gastrointestinal system infections

 46. Genitourinary system infections

 47. Nervous system infections

 48. Staphylococcal infections

 49. Streptococcal infections

 50. Infectious hepatitis

 51. Environmental pollution

 52. Injury by physical agents

 53. Injury by chemical agents

 II. Oncology

 1. Definitions, preneoplastic lesions, pseudotumors

 2. Classification of tumors

 3. Structure, growth of tumorsŤ

 4. Invasion and metastases

 5. Characteristics of benign and malignant tumors

 6. Carcinoma in situ

 7. Carcinogenesis, etiology of tumors

 8. Effects of tumor on host

 9. Grading and staging of tumors, tumor prognosis

 10. Fibroma, myxoma, lipoma, angioma (+ sarcomas)

 11. Chondroma, chordoma, osteoma (+sarcomas)

 12. Leiomyoma, leiomyosarcoma, rhabdomyoma, rhabdomyosarcoma

 13. Hemoblastoses, myeloproliferative syndrome

 14. Hodgkinřs disease

 15. Non-Hodgkin malignant lymphomas - Kiel classification

 16. Tumors of the squamous stratified epithelium

 17. Tumors of transitional epithelium

 18. Benign tumors of the glandular epithelium

 19. Malignant tumors of the glandular epithelium

 20. APUDomas and carcinoid tumors

 21. Neuroectodermal tumors of the CNS

 22. Tumors of the meninges and peripheral nervous system

 23. Tumors of melanocytes

 24. Mixed tumors, germinal tumors

 25. Choriocarcinoma, mesothelioma

 26. Tumors of the heart

 27. Tumors of the lymph nodes

 28. Tumors of the upper respiratory tract

 29. Bronchopulmonary tumors

 30. Tumors of the oral cavity, incl. salivary glands andŤ

 odontogenic tumors

 31. Tumors of the esophagus and stomach

 32. Neoplasms of the small and large intestine

 33. Tumors of the liver, biliary tract and pancreas

 34. Tumors of the kidney and urinary tract

 35. Testicular tumors

 36. Tumors of the prostate and penis

 37. Vulvar and cervical tumors

 38. Tumors of the endometrium and myometrium

 39. Tumors of the ovary

 40. Tumors of the breast

 41. Intracranial tumors

 42. Tumors of the endocrine system

 43. Tumors of the musculoskeletal system

 44. Skin tumors and pseudotumorous lesions

 III. Special Pathology

 1. Congenital heart disease

 2. Pericardial disease

 3. Endocarditis

 4. Acquired heart disease (vitia cordis acquisita)

 5. Myocarditis

 6. Cardiomyopathy

 7. Ischemic heart disease

 8. The heart in hypertension

 9. Atherosclerosis and other arterial dystrophies

 10. Arteritis

 11. Aneurysms

 12. Pathology of the veins and lymphatic vessels

 13. Posthemorrhagic and hemolytic anemia

 14. Anemias of diminished erythropoesis, polycytemia

 15. Bleeding disorders

 16. Pathology of the spleen

 17. Nonneoplastic disorders of white cells

 18. Pathology of the thymus

 19. Nose and paranasal cavities

 20. Larynx and trachea

 21. Pediatric lung diseases

 22. Bronchitis, asthma

 23. Bronchiectasia, bronchostenosis

 24. Emphysema, atelectasis

 25. Pulmonary edema

 26. Pulmonary thrombembolism

 27. Pulmonary hypertension

 28. Acute and chronic restrictive lung diseases

 29. Classification of pulmonary infections, lobar pneumonia

 30. Bronchopneumonia

 31. Primary atypical pneumonias, fungal infections

 32. Pulmonary tuberculosis

 33. Pleura

 34. Diseases of the oral cavity

 35. Pathology of salivary glands

 36. Pathology of the esophagus

 37. Gastritis

 38. Peptic ulcers

 39. Developmental disorders, diverticulosis

 40. Intestinal vascular disorders

 41. Inflammatory diseases, obstructive disease, ileus

 42. Enteritis, appendicitis, colitis

 43. Malabsorption syndrome

 44. Pathology of the peritoneum

 45. Liver: metabolism of the bilirubin, jaundice, hepatic failure

 46. Hereditary disorders of bilirubin metabolism, pediatric liverŤ

 disease

 47. Circulatory disorders of the liver

 48. Viral hepatitis

 49. Drug- and toxin-induced liver disease

 50. Liver cirrhosis

 51. Hemochromatosis, Wilsonřs disease, alpha-1-antitrypsinŤ

 deficiency

 52. Cholangitis and liver abscess

 53. Cholecystitis, cholelithiasis

 54. Mucoviscidosis

 55. Acute hemorrhagic necrosis of the pancreas, pancreatitis

 56. Kidney - malformation, renal cysts

 57. Blood supply disorders of the kidney

 58. Glomerular diseases, pathogenesis and classification

 59. Causes of the nephritic syndrome

 60. Causes of the nephrotic syndrome

 61. Tubulointerstitial nephritis

 62. Acute tubular and diffuse cortical necrosis

 63. Hydronephrosis, renal stones

 64. Pathology of the renal pelvis, urether and urinary bladder

 65. Pathology of the penis and prostate

 66. Pathology of the testis

 67. Pathology of the vulva and vagina

 68. Pathology of the cervix uteri, endometritis, endometriosis

 69. Dysfunctional uterine bleeding and endometrial hyperplasia

 70. Pathology of Fallopian tubes and ovaries

 71. Pathology of the pregnancy

 72. Inflammations and fibrocystic changes of the breast

 73. Intracranial hypertension, cerebral edema, hydrocephalus

 74. Intracranial nontraumatic hemorrhage

 75. Intracranial injuries

 76. Ischemic cerebral disease

 77. Pachymeningitis, leptomeningitis

 78. Purulent encephalitis

 79. Viral and other encephalitis

 80. Degenerative diseases - classification, Parkinsonřs andŤ

 Huntingtonřs disease, amyotrophic lateral sclerosis

 81. Alzheimerřs disease, multiple sclerosis, nutritional andŤ

 metabolic encephalopathies

 82. Pathology of the hypophysis

 83. Pathology of the thyroid gland

 84. Pathology of the parathyroid glands

 85. Pathology of the endocrine pancreas, diabetes mellitus

 86. Pathology of the adrenal glands

 87. Skeletal muscle pathology

 88. Hereditary diseases of the musculoskeletal system

 89. Metabolic diseases of the musculoskeletal systemŤ

 - osteomalacia, rachitis, avitaminosis C, osteoporosis, vonŤ

 Recklinghausenřs disease

 90. Osteomyelitis, tuberculosis, m. Paget, fibrous dysplasia,Ť

 hypertrophic osteoathropathy

 91. Osteoarthritis, suppurative arthritis, rheumatoid arthritis,Ť

 spondyloarthropathias

 92. Infections and non-infectious inflammatory lesions of

 the skin

 93. Granulomatous lesions, vascular lesions of the skin

 94. Pathology of the dermal connective tissue