

**CONSPECTUS**  
**PROPEDEUTICS OF SURGICAL DISEASES**  
**III-rd year Medical students**

Prepared by: prof. Yonkov  
Approved by: Prof. Stefanova  
Protocol from the CC № /13.02.20

***I. For the WRITTEN EXAM***

1. History of Surgery. Surgery in Bulgaria.
2. Antiseptics. History. Antiseptic agents
3. Aseptics. History of Aseptics. An Operating room's structure and organization.
4. Basics of surgical treatment - organization and planning. Surgical instruments –types. Surgical Sutures and bandages.
5. Preoperative assessment of a surgical patient
6. Postoperative period. Postoperative complications – surgical, pulmonary, cardiovascular, gastrointestinal, renal, hepatic, hepatorenal syndrome
7. Preparation of the surgical team. Preparation of the operating field
8. Surgical operation. Types of operations.
9. Antibiotics in surgery. Indications and Complications.
10. Basic surgical manipulations in surgery. Puncture - types, indications, technique. Puncture of blood vessels and anatomical cavities.
11. Basic surgical manipulations - Puncture of abscess and hematoma. Tubes – types, indications and techniques.
12. Basic surgical procedures - Tomy. Stomy
13. Basic surgical procedures - Incision. Excision. Trepanation.
14. Basic surgical procedures - Anastomosis. Bypass
15. Basic surgical procedures - Resection. Ectomy. Amputation
16. Anesthesia – history. Definition. Types
17. Local anesthesia - types, agents, indications, technique, complications.
18. Shock – types, pathophysiology, basic principles of treatment
19. Clinical death – signs and symptoms. Principles of management
20. Congenital anomalies – teratogenic factors and prenatal diagnosis.
21. Congenital diseases - basic principles of surgical treatment.
22. Congenital anomalies of head and neck.
23. Congenital anomalies of the gastrointestinal tract.
24. Trauma. Definition. Types and Classification.
25. Blunt injuries. Bruises. Compressions. Crush syndrome. Traumatic decollement.
26. Blunt head injury. Commotion, Contusion, Cerebral compressions.
27. Blunt thoracic and abdominal injuries
28. Open trauma – Wounds
29. Contusion and lacero-contusion Wound.
30. Cut wounds. Bite wounds
31. Gunshot wounds. Puncture wounds
32. Primary and secondary wound healing. Suture of wounds. Types. Scars
33. Principles of wound treatment
34. Postoperative complications of wounds
35. Burns. Definition. Types. Classification. Principles of management- conservative and surgical.
36. Electrical Injuries – local and general. Chemical burns

37. Frost Injuries. Definition, types, stages, manifestation, treatment.
38. Hemorrhage – definition, classification, pathophysiology, clinical features, treatment.
39. Haemostasis - temporary and definitive. Spontaneous hemostasis. Blood Clotting Mechanism.
40. Blood transfusion – history, ABO and Rhesus system /Rh/. Blood groups
41. Blood transfusion – indications and contraindications. Errors and complications
42. Blood transfusion - indications and contraindications for blood transfusion. Blood products.
43. Transplantology. Definition. Terminology. Tissue transplantation.
44. Plastic and reconstructive surgery – Definition .
45. Tissue transplantation - Definition. Terminology. Organ transplantation - kidney, heart, liver, lungs, pancreas
46. Inflammation. Morphological changes. Pathophysiology of the inflammatory process. Local signs and symptoms.
47. Classification of surgical infections. Etiological agents. Acute pyogenic infection – abscess
48. Acute pyogenic infection – phlegmon. Chronic pyogenic infection.
49. Pyogenic skin infection – folliculitis, furuncle, carbuncle, hidradenitis.
50. Pyogenic lymphatic infection. Lymphangitis and lymphadenitis. Elephantiasis
51. General pyogenic infection /sepsis/ - classification, etiology, pathogenesis.
52. General pyogenic infection /sepsis/ - symptoms, diagnosis and treatment. Abdominal sepsis.
53. Anaerobic gas gangrene.
54. Tetanus – symptoms, treatment and prophylaxis.
55. Tuberculosis. Types of surgical tuberculosis. Actinomycosis.
56. Echinococcosis.
57. Acute arterial insufficiency – Embolism and thrombosis.
58. Chronic arterial insufficiency - Raynaud's syndrome and disease. Buerger's disease.
59. Obliterating atherosclerosis. Diabetic angiopathy.
60. Gangrenes. Types. Dry and wet gangrene.
61. Venous insufficiency. Varices – etiology, clinical features and complications.
62. Thrombophlebitis and Phlebothrombosis.
63. Aneurism – definition. Types. Clinical manifestation.
64. Ulcers and Fistulas. Etiology and classification.
65. Osteomyelitis. Etiology and types.
66. Surgical oncology - basics. Epidemiology of cancer. Biology of malignant transformation. Contemporary theories of carcinogenesis.
67. Neoplasm – definition, etiology, and pathogenesis. Genetic aspects.
68. Early diagnosis of malignant diseases- screening methods. Diagnostic tests
69. General principles for the management of neoplasms. Ablastic and antiblasic. Complex methods of treatment – radiotherapy, chemotherapy, hormonal therapy and immunotherapy.
70. Classification of neoplasms. Morphology and biology of tumors. Precancerosis. Paraneoplastic syndromes.
71. Clinical classification of malignant tumors. TNM – system. Basic apparatus and instrumental tests. Morphological diagnosis. Tumor markers.
72. Benign and malignant tumors of epithelial origin.
73. Benign and malignant tumors of connective tissues.
74. Heterogeneous tumors.

75. Surgical endoscopy – principles and indications. Fibrogastroscopy. Fibrocolonoscopy. Rectoromanoscopy.
76. Surgical endoscopy - principles. Laparoscopy - technique, indications, contraindications. Bronchoscopy. VATS..
77. Laparoscopic (mini-invasive) surgery - history, development, principles. Advantages and disadvantages. Instruments and equipment. Types of laparoscopic surgeries.
78. Laparocentesis. Thoracocentesis. Puncture biopsy.
79. Robot-assisted surgery. Telesurgery.

## **II. For the PRACTICAL EXAM**

1. Anamnesis – patient history.
2. General physical examination of a patient.
3. Local physical examination - Inspection, Palpation, Percussion, Auscultation. Examination of acute inflammation.
4. Tumor examination.
5. Head and neck examination.
6. Chest examination.
7. Breast examination
8. Examination of the Abdomen.
9. Abdominal wall examination. Hernia.
10. Anorectal examination.
11. Urological patient examination.
12. Wound examination.
13. Temporary hemostasis.
14. Definitive hemostasis.
15. Blood transfusion - indications, technique, blood groups.
16. Bandages - head and chest.
17. Bandages - upper and lower limb.
18. Nasogastric tube – types and insertion. Sengstaken Blakemore tube.
19. Injections. Types and indications.
20. Enema. Types and indications.
21. Examination of abscess and phlegmon.
22. Aseptic and septic wound dressings.
23. Surgical instruments – types and applications.
24. Tissue incisions - skin, fascia, muscles, peritoneum.
25. Tissue suturing.
26. Primary surgical treatment of wound. Secondary wound closure.

## **LITERATURE**

1. Schwartz's Principles of Surgery, 9 edition.
2. Short practice of surgery- Bailey & Love's
3. Essential Surgery: Problems, Diagnosis and Management
4. Fundamentals of Surgical Practice
5. Surgery – principles in general
6. Sabiston textbook of surgery – 20<sup>th</sup> edition

### **The exam is in 4 stages:**

- I-st stage: Test- As a result of the test over 2 examinations continues  
 II-nd stage: written exam - toward an individual question  
 III-rd stage: practical exam  
 IV-th stage: oral exam