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**GENERAL AND OPERATIVE SURGERY EXAMINATION SYLLABUS**

1. Historical review for the development of the surgery. Surgery in Bulgaria.

2. Antiseptics. Means for antiseptic. Aseptic agents. Structure of an operation theater room.

3. Basics and means for surgical treatment. Organization of a surgical ward. Surgical instruments. Sutures, bandages and other materials.

4. Application of antibiotics in surgery. Significance. Complications.

5. Preoperative evaluation of a surgical patient.

6. Anesthesia – historical facts. Definition. Classification.

7. Patient preparation for general anesthesia. Risks according to the American society of a nesthesiology (ASA). Premedication.

8. Inhalation anesthesia. Phases, characteristics and stages of general anesthesia. Inhalation anesthetics. Anesthesia machine.

9. Local anesthesia, rectal anesthesia, intra-venous anesthesia. Intra-venous anesthetics. Muscle relaxants.

10. Intensive care. Homeostasis – water-electrolyte balance, alkali-acidity condition, energy balance, interchange of gases.

11. Shock – types, pathophysiology, basic principles of management of shock.

12. Clinical death – basic features. Principles of management.

13. Deontology in surgery.

14. Congenital abnormalities– causes.

15. Basic principles of the surgical management of congenital anomalies.

16. Congenital abnormalities of the head and neck.

17. Congenital abnormalities of the gastrointestinal tract.

18. Congenital abnormalities of other organs and systems.

19. Trauma as a disease. Definition. Traumatism. Classification of traumas.

20. Closed mechanical wounds. Bruises. Compressions. Crush syndrome. Traumatic decolman.

21. Closed mechanical wounds. Distorsion, Dislocation, Ruptures.

22. Closed mechanical wounds. Commotion, Contusion, Cerebral compressions.

23. Closed thoracic and abdominal wounds.

24. Bone Fractures

25. Open wounds.

26. Contusions and lacero-contusions. Simple cuts. Bites.

27. Gun shot wounds. Punctured wounds.

28. Primary and secondary wound healing. Suture of wounds. Types. Scars.

29. Principles of wound management.

30. Postoperative complications of wound.

31. Burns. Definition, Types. Classification according to the depth. Principles of management – conservative, surgical, transport of burned patient to the hospital.

32. Injuries from electricution – local and general. Chemical burns.

33. Frost bites. Definition, types, stages, manifestation, treatment basics. Transportation.

34. Hemorrhage – definition, classification, pathophysiology, clinical features.

35. Control of bleeding - Temporary and definitive. Spontaneous hemostasis. Mechanism of blood clotting.

36. Blood transfusion – history, ABO and rhesus system /Rh/

37. Blood transfusion – indications and contra-indications for blood transfusion. Blood products. Mistakes and complications in blood transfusion.

38. Tissue transplantation. Plastic and reconstructive surgeries. Definition, types.

39. Organ transplantation.

40. Inflammation. Morphological changes. Local signs, systemic symptoms.

41. Sources and ways for spreading of the inflammation process. Conditions concerning micro- and macro-organisms.

42. Classification of the surgical infections. Acute pyogenic infection – abscess.

43. Acute pyogenic infection – phlegmon. Chronic pyogenic infection.

44. Pyogenic infections of the skin.–foliculitis,furuncul,Carbuncul, hydradenitis.

45. Pyogenic infection of the lymphatic system. Lymphanginitis and lymphadenitis. Elephantiasis.

46. Surgical Management.

47. Pyogenic infection /sepsis/ - classification, etiology, pathogenesis.

48. General pyogenic infection /sepsis/ - symptoms, diagnosis and treatment.

49. Acute putrid infection. Anaerobic gas gangrene.

50. Tetanus –treatment and prophylaxis.

51. Specific inflammatory diseases. Tuberculosis. Types of surgical tuberculosis. Actinomycosis.

52. Echinococcosis.

53. Acute arterial insufiency – Embolia and thrombosis.

54. Chronic arterial insufiency. Necrosis and gangrenes.

55. Venous insufficiency. Trombophlebitis and Phlebothrombosis..

56. Aneurism – definition. Types.

57. Ulcers and Fistulas.

58. Surgical diseases of the muscles: hernias, Volkman’s contracture.

59. Osteomyelitis, periostitis, perichondritis.

60. Arthritis. Arthrosis. Contractures and joints ankylosis.

61. Acute abdomen. Definition, etiology, morphology.

62. Acute abdomen. Clinical symptoms of acute abdomen with inflammatory origin.

63. Acute abdomen. Clinical symptoms of acute abdomen due to perforation of a viscus organ.

64. Acute abdomen. Clinical symptoms of acute abdomen due to obstruction of an organ.

65. Neoplasm – definition, etiology, and pathogenesis.

66. General principles for the management of neoplasms .

67. Early diagnosis of malignant diseases, screening methods, tests for early diagnosis.

68. Classification of neoplasm. Morphology and biology of tumors. Precancerosis. Paraneoplastic syndromes.

69. Clinical classification of malignant tumors. TNM – system. Basic apparatus and instrumental methods. Morphological diagnosis. Tumor markers.

70. Benign and malignant tumors of epithelial origin. Pigment tumors.

71. Benign and malignant tumors of connective tissues.

72. Tumors of the nervous system.

73. Heterogeneous tumors. Tumors from the remnants of the embryo.

74. Combined methods for the treatment of patients with malignant tumors – radio-, chemotherapy-, hormon-therapy and immunotherapy.

75. Lithiasis diseases. Cholelithiasis. Nephrolithiasis.

76. Hernias.

77. Upper and Lower GI bleeding- clinical presentation, Diagnosis, and Management.

78. Invasive diagnostic methods in surgery. Endoscopy. Thoracoscopy. Puncture biopsy.

79. Laparoscopic surgery. Laparocentesis. Thoracocentesis. Telesurgery.

**Important text books:**

**2. Schwartz's Principles of Surgery, 9 edition.**

**3. Essential Surgery: Problems, Diagnosis and Management**