

## Surgery –General

1. Examination in surgery (physical, imaging methods)
2. Local anesthesia, blocks
3. General anesthesia
4. Basics in resuscitation
5. Unconsciousness, types, diagnosis and treatment, first aid
6. Pathogenesis of surgical infections development
7. Wound infection, prevention, diagnostics, treatment
8. Inflammation of fingers and hand
9. Anaerobic infection, diagnosis, treatment
10. Sterilisation, asepsis, disinfection, antisepsis
11. Antibiotics in surgery
12. Treatment of surgical infections
13. Sepsis (MOF, SIRS)
14. Infusion therapy, fluid management, fluid balance monitoring
15. Nutrition of surgical patient
16. Acid – base balance, basic disorders
17. Blood transfusion
18. Immunology and transplantation
19. Wounds – types, characteristics, methods of treatment
20. Wound healing
21. Puncture and gunshot wounds
22. Bleeding – classification, first aid, treatment
23. Decubitus – classification, prevention, treatment
24. Perioperative period – characteristics
25. Risks of operation - classification, character
26. Postoperative care principles
27. Postoperative complications
28. Surgical wound complications
29. Postoperative respiratory complications
30. Metabolic and neuroendocrine reaction to surgical stress
31. Technique of operation – basic procedures, types of suture
32. Venesection, coniotomy, tracheostomy – description, indication
33. Paracenteses of body cavities – indication, technique
34. Principles of plastic surgery, skin plastics
35. Shock - classification, clinical findings
36. Pathophysiology of shock
37. Prevention and therapy of shock
38. Contemporary war injuries - characteristics, treatment
39. Wound infection in war injuries
40. Tumors – classification and process of dissemination
41. Prevention and diagnosis of tumors, oncological care organisation
42. Hemostatic disorders, pulmonary embolism
43. Thromboembolic diseases, pulmonary embolism – prevention and therapy

## Special surgery I

1. First aid – types, tasks, principles of triage
2. Compartement syndrome, crush syndrome, blast syndrome
3. Polytrauma – classification, principles of treatment
4. Classification of fractures
5. Complications of fractures- early complications, disorders of healing, infection
6. Types of osteosynthesis, indications for surgery
7. Principles of open fracture treatment, classification
8. Principles of conservative fracture treatment
9. Types of bandages, fixation, plaster of Paris
10. Soft tissue injuries ( skin, subcutaneous tissue, muscle, tendons and ligaments)
11. Joint injuries, luxation
12. Characteristics of fractures in paediatrics, principles of treatment
13. Shoulder dislocation
14. Fractures of scapula and clavicle
15. Fractures of humerus (proximal epiphysis, diaphysis)
16. Fractures of distal epiphysis of humerus in children and adults
17. Fractures of olecranon, fractures and dislocation of proximal radius
18. Fractures of forearm (diaphyseal and distal)
19. Fractures of the hand including carpal, metacarpal and phalangeal bones
20. Classification and treatment of fractures of proximal femur
21. Fractures of femur (diaphysis and distal part)
22. Fractures of patella
23. Injury of knee ligaments and meniscus
24. Fractures of tibia (proximal part and diaphysis)
25. Malleolar fractures, tarsal ligaments rupture
26. Fractures of metatarsus and fingers
27. Classification and treatment of pelvic fractures
28. Classification, diagnosis and treatment of spinal fractures
29. Costal fractures (diagnostics, treatment and complications)
30. Blunt and penetrating injuries to the heart and major vessels
31. Traumatic haemoperitoneum, spleen and liver injuries
32. Haemothorax, pneumothorax – types and treatment
33. Thoracic emergencies
34. Lung and bronchial anomalies, cysts
35. Inflammatory lung diseases, complications
36. Lung tumours
37. Lung inflammation and injury
38. Surgical diseases of diaphragm
39. Mediastinum ( tumours, inflammation, injuries)
40. Thoracic outlet syndrome
41. Examination of patient with vascular disease
42. Ischaemia of visceral arteries- clinical manifestation, treatment ( superior mesenteric artery, renal artery)

43. Acute arterial occlusion
44. Chronic arterial disease
45. Arterial aneurysm – clinical manifestation, diagnostics and treatment
46. Principles of arterial surgical reconstruction
47. Major venous occlusion
48. Primary and secondary vein varices
49. Vascular complications of diabetes, surgical treatment

## Special surgery II

1. Hiatal hernia, esophageal achalasia, esophageal diverticuli, tumours and injuries
2. Congenital esophageal diseases, types of atresia, diverticula
3. Peptic ulcer disease, complications
4. Perforation of peptic ulcer
5. Gastric tumours
6. Types of stomach operations
7. Surgical diseases of duodenum, injuries
8. Congenital disease of gastrointestinal tract
9. Injury and inflammation of small bowel, mesenterial lymphadenitis
10. Small bowel tumours, complications after small bowel operations
11. Carcinoid tumour
12. Inflammatory colorectal diseases
13. Colorectal tumours
14. Surgical diseases of anus
15. Abdominal, groin and femoral hernia
16. Incarcerated abdominal hernias
17. Rare and internal hernias, congenital diseases of abdominal wall and diaphragm
18. Surgical access to abdominal cavity, closure of abdominal wall
19. Surgical diseases of the retroperitoneum
20. Cysts and abscesses of liver, subdiaphragmatic and subhepatic area
21. Portal hypertension
22. Liver tumours, obstructive icterus
23. Inflammatory disease of gall bladder and bile ducts. Types of operation
24. Tumours of bile ducts and papilla of Vater
25. Acute inflammatory disease of pancreas
26. Chronic inflammation of the pancreas
27. Tumours of the pancreas
28. Spleen – congenital disease, inflammation, indication for splenectomy
29. Acute abdomen – description and division
30. Peritonitis – types, diagnostics
31. Signs of peritoneal irritation – description and differential diagnosis
32. Diffuse peritonitis
33. Subjective and objective signs of acute abdomen
34. Complications of acute abdomen

35. Mistakes in diagnosis of acute abdomen
36. Acute apendicitis in adultes
37. Atypical acute apendicitis in child age, in elderly, in pregnancy
38. Complications of apendicitis
39. Pathophysiology of bowel obstruction, differential diagnosis of ileus
40. Mechanical ileus, volvulus, intussusception
41. Neurogenic ileus, vascular ileus
42. Differential diagnosis of hypogastric pain
43. Differential diagnosis of epigastric pain
44. Differential diagnosis between inflammatory acute abdomen and ileus
45. GIT bleeding, hematemesi, melena, enterorrhagia
46. Thyroid gland – inflammation and tumours
47. Goiter, classification, thyreotoxicosis
48. Thyroid and parathyroid gland – types of operations
49. Breast – inflammation and tumours. Diagnosis and treatment



