

F-Educational plan of the dicipline

EDUCATIONAL PLAN

Disciplines	General surgery. Introduction to the specialty
Faculty	Medicine named after T.Z. Biktimirova
Name of department	General and operative surgery with topographic anatomy and a course of dentistry
Course	2-3

Direction (specialty) 31.05.0	1 General medicine rection (specialty), full					
Orientation (profile): is not p		name				
full name						
The form of training	full-time					
Date of introduction into the	rt-time, part-time (specify only those that are academic process a 023	at Ulyano	vsk S	tate Un	niversity	
Revised at the Department m		_11	_of_	_ (26)	06,	2024
Revised at the Department m	eeting, Record No.		of	«	>>	20
Revised at the Department m	eeting, Record No.		of	<u> </u>	»	20

Information about the authors:

Full name	Abbreviation of Department	Position, Academic, degree, title		
Smolkina A.V.	General and operative surgery with topographic	Head of the Department, MD, Professor		
Makarov S.V.	anatomy and the course of dentistry	PhD, senior Lecturer		

AGREED	AGREED
Head of department of the department of general and operative surgery with topographic anatomy and the course of dentistry, developing discipline Smolkina A.V/ (Signature) (Name) «_03_»052023_г.	Head of graduating department hospital therapy Wignest Vize-Khripunova M.A./ Signature Full name Full name 2023 Γ.

Form A 1 from 44



1. OBJECTIVES AND AIM OF

The objectives of mastering the discipline:

introducing students to the specialty, determining the place of surgery among all medical disciplines; teach a student to apply knowledge of anatomy, physiology and other fundamental disciplines to solve specific practical clinical problems with an emphasis on children, master the basic principles of diagnosis, treatment and prevention of surgical diseases and perform general medical manipulations with childhood characteristics.

Studying the fundamentals of modern clinical surgery forms clinical thinking and allows the student to subsequently successfully understand not only the diagnosis and treatment of certain surgical diseases, but also master other medical subjects.

The focus is on the characteristics of children's age of patients.

Tasks of mastering the discipline "General Surgery. Introduction to the specialty " Acquaintance of students with the structure of surgical institutions (clinic, general surgery hospital, tuberculosis dispensary, children's clinic, children's surgical department), equipment and equipment of the surgical room. Familiarization with the work of doctors on surgical admission by a patient with an emphasis on childhood. Mastering the basic principles of ethics and deontology with both children and their parents, without which it is impossible to master the art of treating patients. Focus students on the tasks of surgery; distinguish a group of the most common diseases and teach emergency care for surgical patients with childhood problems.

In this case, the main objectives of the discipline are to teach the student:

- purposefully ascertain the patient's complaints and the history of the disease, conduct a physical examination of the surgical patient (examination, palpation, percussion, auscultation), outline a plan for the examination of the surgical patient;
- organize surgical activities in compliance with the rules of asepsis in the premises of the surgical hospital and clinic;
- identify the main surgical syndromes and diagnose the main types of purulent-septic diseases (etiology, pathogenesis, classification, clinic, the basic principles of diagnosis and treatment of the most common surgical diseases);
- training students to provide first aid in case of emergency;
- familiarization of students with the principles of organization and operation of medical institutions of various types;
- the formation of skills for studying scientific literature and official statistical surveys;
- the formation of communication skills with the patient, taking into account ethics and deontology, depending on the identified pathology and characterological characteristics of the patients;
- the formation of the student's communication skills with the team, with pediatric patients and their parents.

2. PLACE OF THE SUBJECT IN THE STRUCTURE OF GEP

In accordance with the Federal State Educational Standard of Higher Education, the discipline "General surgery. Introduction to the specialty" refers to the basic part of the specialty disciplines on May 31.05. 01 "Medicine" (level of specialty) of higher medical education and is studied in the fourth and fifth semesters. Mastering discipline is based on knowledge, skills and skills, formed by previous disciplines and practices:

Biology: knowledge: general patterns of origin and development of life; anthropogenesis and human ontogeny; laws of genetics, its importance for medicine; regularities of heredity and

Form A 2 from 44

Ministry of science and high education RF	
Ulyanovsk State University	
Faculty of Medicine named after Biktimirov T.Z., IMEiPC	
F-Educational plan of the dicipline	



variability in individual development as a basis for understanding the pathogenesis and etiology of hereditary and multifactorial human diseases; skills: use physical and biological equipment, work with magnifying equipment (microscopes, optical and simple loops); to draw up a family pedigree outline based on interviewing patients; skills: to determine the type of inheritance of diseases of internal organs.

Biochemistry: knowledge: the chemical and biological essence of processes occurring in a living organism, at the molecular and cellular levels; structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation; the role of cell membranes and their transport systems in metabolism in the body; safety rules and work in chemical and biological laboratories, with reagents, instruments, animals; skills: a substantiation of the standard of biochemical laboratory researches at various diseases of internal organs; skills: interpreting the results of the most common methods of laboratory biochemical research.

Human Anatomy: knowledge: anatomical and physiological features of the structure and development of the human body; skills: to correlate the topography of internal organs with the projection on the surface of the human body in the clinical study of the patient; skills: to determine the projection of internal organs on the surface of the patient's body.

Histology, embryology, cytology: knowledge: the basic laws of development and life activity of the human body on the basis of the structural organization of cells, tissues and organs; histofunctional features of tissue elements; skill: analyze the histological state of various cellular, tissue and organ structures of a person; work with magnifying equipment (microscopes, optical and simple loops); skills: to interpret the results of histological examination of biopsy material of normal organs.

Normal physiology: knowledge: the basic physical phenomena and patterns underlying the processes occurring in the human body; functional systems of the human body, their regulation and self-regulation under the influence of the environment in the norm; skill: orientation in the mechanisms of functional processes in the human body; skills: interpreting the results of normal instrumental and laboratory research methods.

Educational practice "Care for the sick": knowledge: types of sanitary treatment of patients, types of fevers, features of observation and care for patients with diseases of various body systems; skills: medical treatment of a patient when entering a hospital and during a hospital stay, changing the bed linen and bed linen of a patient, treatment of decubitus; care for patients of different age, suffering from diseases of various organs and systems, their transportation; thermometry, daily diuresis control, collection of biological material for laboratory studies, anthropometry, setting of different types of enemas, feeding of severe patients; disinfection and pre-sterilization preparation of medical instruments, materials and means of care for patients; skills: care for patients, taking into account their age, nature and severity of the disease; care for seriously ill and agonizing patients.

3. LIST OF EXPECTED RESULTS OF INSTRUCTION ON THE SUBJECT (UNIT), CORELATED WITH PLANNED RESULTS OF COMPLETING THE PROGRAM

Form A 3 from 44



F-Educational plan of the dicipline

The study of the subject «General Surgery. Introduction to the specialty» within the completion of the educational program is directed towards the formation of the following general and professional competences in students:

Competence index. Content of a competence (or a part of it)

The proposed results of the course students are:

GPC-4

Able to use medical devices provided for by the procedure for the provision of medical care, as well as conduct examinations of a patient in order to establish a diagnosis

ID-1 OPK4

Know: the basics of the legislation of the Russian Federation on the protection of public health, the main regulatory and technical documents; basic principles of management and organization of medical care to the population; organization of medical control over the state of health of the population, issues of examination of disability and medical and legal assistance to the population; etiology, pathogenesis and preventive measures for the most common diseases; modern classification of diseases; clinical picture, characteristics of the course and possible complications of the most common diseases occurring in a typical form in different age groups; diagnostic methods, diagnostic capabilities of methods of direct examination of a patient of a therapeutic, surgical and infectious profile, modern methods of clinical, laboratory instrumental examination of patients (including endoscopic, radiological methods of ultrasound diagnostics); criteria for the diagnosis of various diseases; clinical and pharmacological characteristics of the main groups of drugs and the rational choice of specific drugs in the treatment of the main pathological syndromes of diseases and emergency conditions in patients, including the basics of anti-doping legislation; procedures for the provision of medical care for the main diseases of the therapeutic, surgical, obstetricgynecological and other profiles.

ID-2 OPK4

Be able to: plan, analyze and evaluate the quality of medical care, determine the status of the patient: collect anamnesis, interview the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, blood pressure measurement, determination of the properties of the arterial pulse, etc.) .); assess the patient's

Form A 4 from 44

Ministry of science and high education RF
Ulyanovsk State University
Faculty of Medicine named after Biktimirov T.Z., IMEiPC

Форма



condition in order to make a decision on the need to provide him with medical care; to conduct a primary examination of systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joints, eves. ear, throat, nose; to set priorities for solving the patient's health problems: critical (terminal) condition, condition with pain syndrome, condition with chronic disease, condition with infectious disease, disability, geriatric problems; to make a preliminary diagnosis - to synthesize information about the patient in order to determine the pathology and the reasons that cause it; outline the volume of additional studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a sufficient result; formulate a clinical diagnosis; develop a plan of therapeutic (surgical) actions, taking into account the course of the disease and its treatment; formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents, substantiate pharmacotherapy in a particular patient with major pathological syndromes and emergency conditions, determine the route of administration, regimen and dose of drugs, assess the effectiveness and safety of the treatment; apply various methods of drug administration.

ID-3 OPK4

Possess: Possess the methods of using medical devices in the diagnosis and treatment of therapeutic patients

GPC-7

Able to prescribe treatment and monitor its effectiveness and safety

IDK-1 OPK7

Know: classification and main characteristics of drugs, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of drugs, side effects; general principles for the preparation of prescriptions and the preparation of prescription drug prescriptions; methods of treatment and indications for their use; the mechanism of the therapeutic action of physiotherapy exercises

Form A 5 from 44

Форма



and physiotherapy, indications and contraindications to their appointment, their features conducting; types and methods of modern general anesthesia (mask, endotracheal, intravenous), prevention of postoperative pulmonary complications, - clinical and pharmacological characteristics of the main groups of drugs and rational choice of specific drugs in the treatment of major pathological syndromes of diseases and emergency conditions in patients, including the basics of anti-doping legislation ...

ID-2 OPK7

Be able to: use physical, chemical and biological equipment; classify chemical compounds based on their structural formulas; predict the direction and result of physicochemical processes and chemical transformations of biologically important substances; use the IUPAC nomenclature for compiling names according to the formulas of typical representatives of biologically important substances and drugs; to analyze the action of drugs in terms of the totality of their pharmacological properties and the possibility of their use for therapeutic treatment; write out prescriptions for medicines, use various dosage forms in the treatment of certain pathological conditions, based on the characteristics of their pharmacodynamics and pharmacokinetics; apply basic antibacterial antiviral and biological drugs; to evaluate possible manifestations of drug overdose and how to eliminate them; formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents, substantiate pharmacotherapy in a particular patient with major pathological syndromes and emergency conditions, determine the route of administration, regimen and dose of drugs, assess the effectiveness and safety of the treatment; apply various methods of drug administration.

ID-3 OPK7

Own: methods of analysis of clinical, laboratory and instrumental data to determine the algorithm for patient management, drawing up

Form A 6 from 44



F-Educational plan of the dicipline

PC-2

Readiness to collect and analyze patient complaints, data from his anamnesis, examination results, laboratory, instrumental, pathological and anatomical and other studies in order to recognize a condition or establish the presence or absence of a disease

drug and non-drug treatment regimens.

Know: diagnostic methods, diagnostic capabilities of methods of direct examination of a patient of a therapeutic, surgical and obstetric-gynecological profile; modern methods of clinical, laboratory, instrumental examination of patients (including endoscopic, radiological methods, ultrasound diagnostics).

Be able to: determine the patient's status: collect anamnesis, interview the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation); to conduct a primary examination of systems and organs: respiratory, cardiovascular, blood and hematopoietic organs, digestive, endocrine and urinary; outline the volume of additional studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a reliable result.

Own: methods of general clinical objective examination (questioning, examination, palpation, percussion, auscultation) for diseases of internal organs; interpretation results of laboratory, instrumental diagnostic methods for pathology of internal organs.

PC-3

Readiness to manage and treat patients with various nosological forms on an outpatient basis and in a day hospital Know: the criteria for the diagnosis of the most common diseases of internal organs. Features of the organization and scope of work of the outpatient clinic doctor, modern diagnostic capabilities of the polyclinic service, methods of emergency measures, indications for planned hospitalization; features of treatment of diseases of internal organs in outpatient settings, incl. day hospital conditions.

Be able to: formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents; to develop an algorithm for the management of a patient's therapeutic profile in a polyclinic.

Own: an algorithm for determining the tactics of managing a patient with a therapeutic

Form A 7 from 44

Ministry of science and high education RF	
Ulyanovsk State University	Форма
Faculty of Medicine named after Biktimirov T.Z., IMEiPC	
F-Educational plan of the dicipline	



pathology, conducting a differential diagnosis
in a therapeutic pathology.

4. Volume of the subject

- 4.1. Volume of the subject in credit points (total): 7 credit points
- 4.2. On types of academic workload (in hours): 252

	Number of hours (training form - full-time)					
Kind of study	All according	Including by semester				
	to plan	semester number	semester number			
		4	5			
Contact work enrolled with the teacher in accordance with MPS		-	-			
Auditory lessons:	216	144	72			
lectures	36	18	18			
Seminars and workshops	90 of them in an interactive way 18	54	36			
Laboratory work, workshops	-	-	-			
Independent work	90	72	18			
The shape of the current knowledge of the control and monitoring of independent work: testing, essay, presentation, problem solving	-	-	-			
Course work	-	-	-			
Forms intermediate certification. (Test). (Exam).	36	-	36			
Total hours on discipline	252	144	108			

If it is necessary to use partially or exclusively remote educational technologies in the educational process, the table shows the number of hours of work of teaching staff with students for conducting classes in a remote format using e-learning.

4.3. Contents of the discipline (module). Distribution of hours on themes and kinds of study: Number of hours -

The form of training: full time

Form A 8 from 44



		Types of studies					
		Auditory lessons			Take-	Indep	The shape
Name and sections and topics	Total	Lek- tion	Cal- practi cal classes , semin ar	Labor a- Tornio works, practic al Kum	ment in INTER - hydroc hloric ktiv- form	enden t work	of the current control of knowledg e
one	2	3	4	5	6	7	
4 semester							
Section 1. Antiseptic and Aseptic							
Theme 1. History of the development of surgery. Great surgeons. Deontology.	9	-	3	-	-	6	poll
Theme 2. Antiseptics, types, antiseptic preparations and their use.	11	2	3	-	-	6	Tests, poll
Theme 3. Aseptics, sources of infection, prevention of airborne and drip infections. Organization of the surgical department. Preparing the surgeon's hands for surgery.	10	1	3	-	-	6	Tests, poll
Theme 4. Asepsis. Prevention of contact infection. Sterilization of tools, material and linen. Prevention of implantation infection. Sterilization of suture and plastic material.	10	1	3	-	-	6	Tests, poll
Section 2. Anesthesia and resuscitat	1	T		T	T	1	Ţ
Theme 5. General issues of anesthesiology. General anesthesia methods, indications, contraindications and complications. Methods of local anesthesia.	11	2	3	-	-	6	Tests, poll
iviculous of focal affestitesta.							
Theme 6. Resuscitation in violation of the vital functions of the body.	7	-	3	-	2	2	Tests, poll

Form A 9 from 44

Ministry of science and high education RF
Ulyanovsk State University
Faculty of Medicine named after Biktimirov T.Z., IMEiPC

Форма



	nai pian or an	F					
Section 3. Bleeding, hemostasis, bleeding	ood trans	fusion.	blood sub	stitution			
Theme 7.	7	,	3	-	2	2	Tests, poll
Bleeding and hemorrhage. Concept, classification, first aid and treatment. Methods for stopping external bleeding.							
Theme 8.	9		3	_	_	6	Tests, poll
Clotting disorder in surgical patients and methods for their correction. Endogenous intoxication and water-electrolyte disturbances in surgery. The principles of its correction							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Theme 9.	6	1	3	-	-	2	Tests, poll
Blood type and Rh factor. Determination of blood type.							
Theme 10.	10	1	3	-	-	6	Tests, poll
Transfusion of blood components and blood substitutes. Errors and complications. Donation							
Section 4. Thermal damage	1	1	1				
Theme 11. Thermal and chemical burns.	6	1	3	-	-	2	Tests, poll
Theme 12.	6	1	3	_	_	2	Tests, poll
Cold injury and electrical injury.							7 1
Section 5. Wounds. Wound process				1			
Theme 13. Wounds. The wound process. Treatment of wounds, its types, types of wound healing. Infected wounds.	7	2	3	-	-	2	Tests, poll
Theme 14.	11		3	-	2	6	Tests, poll
Desmurgy.							

Form A 10 from 44

Ministry of science and high education RF	
Ulyanovsk State University	
Faculty of Medicine named after Biktimirov T.Z., IMEiPC	

Форма



Section 6. Fundamentals of surgical	patholog	gy and r	nethods f	or its corre	ection		
Theme 15.	11	2	3	-	-	6	Tests, poll
Parasitic surgical diseases.							
Theme 16.	7	2	3	-	-	2	Tests, poll
Fundamentals of surgical oncology. Tumors							
Theme 17.	6	1	3	-	-	2	Tests, poll
Malformations.							
Theme 18.	6	1	3	-	-	2	Tests, poll
Plastic and reconstructive surgery. Transplantology.							
Total per semester	144	18	54	-	6	72	tickets
5 semester			<u> </u>	<u> </u>	<u> </u>		
Section 7. Damage Surgery Basics	ı	1	1		1	1	1
Theme 19. Examination of a surgical patient.	5		2	-	2	3	Tests, poll
Theme 20.	5	2	2	-	-	1	Tests, poll
Bone fractures. Treatment of bone fractures.							
Theme 21.	3		2	-	-	1	Tests, poll
Dislocations of the joints. Joint treatment and reduction.							
Theme 22. Damage to soft tissues. Syndrome of long compression and syndrome of positional compression.	5	2	2	-	-	1	Tests, poll
Theme 23.	4		2	-	2	2	Tests, poll
Transport immobilization.							
Theme 24.	5	2	2	-	2	1	Tests, poll
Injuries to the head, chest and							

Form A 11 from 44

Ministry of science and high education RF	
Ulyanovsk State University	
Faculty of Medicine named after Biktimirov T.Z., IMEi	PC

Форма



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abdomen.							
Section 8. Fundamentals of purulen	t-septic s	urgery		_		_	
Topic 25.	5	2	2	-	-	1	Tests, poll
Acute purulent infection. General questions, problems. Purulent diseases of the skin and subcutaneous tissue.							
Theme 26.	3		2	-	-	1	Tests, poll
Acute purulent diseases of soft tissues and glandular organs, lymph nodes.							
Theme 27.	5	2	2	-	2	1	Tests, poll
Acute purulent-destructive diseases of the abdomen.							
Purulent inflammatory diseases of the serous cavities.							
Theme 28.	3		2	-	-	1	Tests, poll
Acute purulent diseases of bones, joints, hands and feet.							
Theme 29.	5	2	2	-	-	1	Tests, poll
Sepsis, anaerobic clostridial and non-clostridial soft tissue infections.							
Topic 30.	4	1	2	-	-	1	Tests, poll
Acute specific infection							
Theme 31.	4	1	2	-		1	Tests, poll
Chronic specific infection							
Section 9. Circulatory Surgery]				
Theme 32.	5	2	2	-	-	1	Tests, poll
Basics of circulatory disorders surgery(necrosis, gangrene, ulcers and fistulas).							
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Form A 12 from 44

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Форма	
F-Educational plan of the dicipline	_	

Theme 33	3		2	-	_	1	Tests, poll
Insufficiency of blood and lymph							_
circulation of the extremities.							
Section 10. Surgery							
Theme 34. Surgery. Preoperative preparation of patients.	3	1	2	-	-	-	Tests, poll
Topic 35.	3	1	2	-	2	-	Tests, poll
The postoperative period.							
Theme 36.	2	-	2	-	2	-	Tests, poll
Disease history. Diagnostic algorithm. Epicrisis.							
<u>EXAM</u>	36	-	-	-	-	-	tickets
Total per semester	108	18	36		12	18	
All for discipline	252	36	90		18	90	

5. COURSE CONTENT

Theme 1

History of the development of surgery. Great surgeons. Deontology.

Theme 2

Antiseptics, types, antiseptic preparations and their use.

Theme 3.

Aseptics, sources of infection, prevention of airborne and drip infections. Organization of the surgical department. Preparing the surgeon's hands for surgery.

Theme 4.

Asepsis. Prevention of contact infection. Sterilization of tools, material and linen. Prevention of implantation infection. Sterilization of suture and plastic material.

Theme 5.

General issues of anesthesiology. General anesthesia methods, indications, contraindications and complications.

Methods of local anesthesia.

Theme 6.

Resuscitation in violation of the vital functions of the body.

Theme 7.

Form A 13 from 44

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC

Форма



F-Educational plan of the dicipline Bleeding and hemorrhage. Concept, classification, first aid and treatment. Methods for stopping external bleeding. Theme 8. Clotting disorder in surgical patients and methods for their correction. Endogenous intoxication and water-electrolyte disturbances in surgery. The principles of its correction Theme 9. Blood type and Rh factor. Determination of blood type. Theme 10. Transfusion of blood components and blood substitutes. Errors and complications. Donation Theme 11. Thermal and chemical burns. Theme 12. Cold injury and electrical injury. Theme 13. Wounds. The wound process. Treatment of wounds, its types, types of wound healing. Infected wounds. Theme 14. Desmurgy. Theme 15. Parasitic surgical diseases.

Theme 16.

Fundamentals of surgical oncology. Tumors

Theme 17.

Malformations.

Theme 18.

Form A 14 from 44

Ministry of science and high education RF
Ulyanovsk State University
Faculty of Medicine named after Biktimirov T.Z., IMEiPC

Форма



Plastic and reconstructive surgery. Transplantology.

Total per semester

Theme 19.

Examination of a surgical patient.

Theme 20.

Bone fractures. Treatment of bone fractures.

Theme 21.

Dislocations of the joints. Joint treatment and reduction.

Theme 22. Damage to soft tissues. Syndrome of long compression and syndrome of positional compression.

Theme 23.

Transport immobilization.

Theme 24.

Injuries to the head, chest and abdomen.

Topic 25.

Acute purulent infection. General questions, problems. Purulent diseases of the skin and subcutaneous tissue.

Theme 26.

Acute purulent diseases of soft tissues and glandular organs, lymph nodes.

Theme 27.

Acute purulent-destructive diseases of the abdomen.

Purulent inflammatory diseases of the serous cavities.

Theme 28.

Acute purulent diseases of bones, joints, hands and feet.

Theme 29.

Sepsis, anaerobic clostridial and non-clostridial soft tissue infections.

Topic 30.

Acute specific infection

Theme 31.

Form A 15 from 44



Chronic specific infection

Theme 32.

Basics of circulatory disorders surgery(necrosis, gangrene, ulcers and fistulas).

Theme 33

Insufficiency of blood and lymph circulation of the extremities.

Theme 34. Surgery. Preoperative preparation of patients.

Topic 35.

The postoperative period.

Theme 36.

Disease history. Diagnostic algorithm. Epicrisis.

6. TOPICS practical and seminars

Topic 1. History of the development of surgery. Great surgeons. Deontology.

Questions:

- 1. Epoch of the development of surgery.
- 2. The development of surgery until the 19th century.
- 3. The ideological precursors of antiseptics (L. Pasteur, N. And. Pirogov) and its creators (I. Zemmelweis, D. Lister).
 - 4. The role of Pirogov N.I. in the development of surgery.
 - 5. The development of surgery in the 19-20 centuries.
 - 6. The development of surgery in Russia.
 - 7. The current stage of development of surgery.
 - 8. Deontology the concept.
 - 9. Ethical behavior with patients and doctors.

Topic 2. Antiseptic, its types, antiseptic preparations and their use.

Questions:

- 1. Antiseptic. Definition of the concept.
- 2. Types of antiseptics (mechanical, physical, chemical, biological).
- 3. The mechanism of action of antiseptics,
- 4. Characteristics of basic antiseptics and antibiotics.
- 5. Methods of using antiseptic preparations.
- 6. Rational antibiotic therapy. Complications of antibiotic therapy and their prevention.
- 7. Enzymotherapy of surgical infection. Used enzymes.

Topic 3. Asepsis, sources of infection, prevention of airborne and drip infections. Organization of the surgical department. Preparing the surgeon's hands for surgery.

Questions:

Form A 16 from 44





- 1. Asepsis. Definition of the concept. The value of asepsis for surgery in modern conditions.
- 2. Sources of infection. Endogenous and exogenous infections (airborne, contact, implant). The concept of nosocomial, intrahospital, nasocomial infection.
 - 3. Organization of the surgical department, its layout, the main premises and their device.
 - 4. Chambers, dressing, their equipment and cleaning.
 - 5. Operational unit, its device and equipment. Cleaning in the operating room, its types.
 - 6. The behavior of staff and visitors in the operating room.
 - 7. Device and equipment of the surgical clinic office.
- 8. Orders and instructions of the Ministry of Health of the Russian Federation on the prevention of intra-hospital infection. The essence of the orders.
 - 9. Training of hands of the personnel for operation.

Topic 4. Aseptic. Prevention of contact infection. Sterilization of tools, material and linen. Prevention of implantation infection. Sterilization of suture and plastic material.

Ouestions:

- 1. Prevention of contact infection. The concept of contact infection, its sources.
- 2. Surgical instruments: classification, features of their device, sterilization and care for them.
 - 3. Dressing material: its types and basic properties. Requirements for dressings.
 - 4. Preparation of dressing and surgical material, as well as linen and their sterilization.
 - 5. Autoclave, its device and work.
 - 6. Sterilization gloves.
 - 7. Preparation of the surgical field.
 - 8. Hot air (dry heat) sterilization in dry heat ovens (air sterilizers).
 - 9. Control of autoclave sterilization and dry heat ovens (air sterilizers).
 - 10. Implant infection. The concept and its sources.
 - 11. Suture material, its types and purpose, classification by source. Requirements.
- 12. Modern stitching machines. Their types and purpose. Suture material applied here. Sterilization of the sewing devices.
 - 13. Autoplastic materials used in surgery and traumatology and their sterilization.
 - 14. Homoplastic materials used in surgery and traumatology and their sterilization.

Topic 5. General issues of anesthesiology. Methods of general anesthesia, indications, contraindications and complications. Methods of local anesthesia.

Questions:

- 1. General anesthesia (anesthesia). Types of anesthesia as prescribed. Mechanisms of action of drugs on the body (the theory of anesthesia).
 - 2. Preparations used for general anesthesia and their pharmacodynamics.
 - 3. Muscle relaxants, their mechanism of action and complications.
 - 4. The clinical course of anesthesia in stages.
 - 5. Mask anesthesia. Indications, contraindications and complications.
 - 6. Endotracheal anesthesia. Indications, contraindications and complications.
 - 7. Intravenous anesthesia. Indications, contraindications and complications.
- 8. Local anesthesia. Preparations for local anesthesia, their pharmacodynamics. Local layered infiltration anesthesia by the method of tight creeping infiltration according to Vishnevsky.
 - 9. Methods of local anesthesia. Indications, contraindications and complications.
- 10. Local intraosseous, intravenous and intraarterial anesthesia. Indications, contraindications and complications.

Form A 17 from 44





- 11. Conductive, spinal and epidural anesthesia. Indications, contraindications and complications.
- Theme 6. Resuscitation in violation of the vital functions of the body. The form of conducting a practical lesson, work in the simulation center a business game.

Questions:

- 1. Neuroleptanalgesia. Indications, contraindications and complications. Used drugs.
- 2. Equipment for anesthesia and mechanical ventilation (ALV). Methods of mechanical ventilation.
 - 3. Methods for managing vital body functions (artificial hypotension, hypothermia.
 - 4. Reanimation. Notion Vital functions of the body, their types and causes of violations.
- 5. Methods of elementary and skilled resuscitation. Restoration of the patency and function of the respiratory system, circulatory system and metabolism. The equipment used for resuscitation.
 - 6. Central venous pressure (CVP).
- Topic 7. Bleeding and blood loss. Concept, classification, first aid and treatment. Methods to stop external bleeding.

Questions:

- 1. The concept of bleeding and blood loss. The hemostasis system is normal.
- 2. Classification of bleeding.
- 3. External bleeding, causes, clinic.
- 4. Internal bleeding, causes, clinic.
- 5. Temporary methods to stop bleeding.
- 6. Plaits to stop external bleeding, their types, the technique of blending, depending on the location of the bleeding and its nature.
 - 7. Methods for the final stop of bleeding. Blood loss treatment.
- 8. The reaction of the body to bleeding and blood loss. The value of compensatory mechanisms.
 - 9. Factors contributing to independent bleeding. Outcomes of bleeding.
- 10. Catheterization, puncture of the central (subclavian, femoral, internal jugular) and peripheral veins.
- 11. Methods of determination and value for determining the volume of blood loss and the degree of blood loss.
- Topic 8. Disorder of blood coagulation in surgical patients and methods for their correction. Endogenous intoxication and water and electrolyte disturbances in surgery.

The principles of its correction.

Questions:

- 1. The hemostasis system is normal.
- 2. Methods for the study of hemostasis.
- 3. The effect of diseases, injuries and surgeries on hemostasis.
- 4. Thromboembolic complications, causes, clinical presentation, treatment and prevention.
- 5. Reduction of blood coagulation properties in diseases, injuries, operations.
- 6. Hemorrhagic syndrome in surgery. DIC or TGS-syndrome.
- 7. The concept of endogenous intoxication and its main types in surgical patients.
- 8. Clinical and laboratory findings. Assessment of the severity of patients.
- 9. Principles of complex treatment. Stimulation of natural detoxification mechanisms, artificial detoxification.
 - 10. Efferent detoxification methods.
 - 11. Surgical elimination of endogenous intoxication.

Form A 18 from 44



- 12. Water-electrolyte disorders in surgical patients, causes.
- 13. Clinical and laboratory diagnosis of water and electrolyte disorders in surgical patients.
- 14. Methods of correction of water and electrolyte disorders, applied solutions.
- 15. Dangers and complications of plasma-replacement solutions.
- 16. Preparations for parenteral nutrition in order to correct protein exchange.

Theme 9. Blood type and Rh factor. Determination of blood type.

Questions:

- 1. Historical data. The concept of science transfusiology.
- 2. Erythrocyte and plasma factors of blood groups (agglutinogens and agglutinins). The designation of blood groups.
 - 3. Method of determining blood groups. Errors in the determination of blood groups.
 - 4. Rh factor, its value, the method of determination.
 - 5. Compatibility tests. Methods of conducting tests.
- 6. Indications and contraindications for blood transfusion and its components and preparations.
- 7. Preservation of blood. Preparation of components and blood products, their storage and shelf life.
 - 8. The mechanism of action of transfused blood.
- 9. Ways of blood components transfusion. Intraosseous path. Method of puncture of the epiphysis of large bones, sternum. Other indications for these punctures.

Topic 10. Transfusion of blood components and blood substitutes.

Errors and complications. Donation

Ouestions:

- 1. Technique of intravenous, intraarterial and intraosseous transfusion of blood and its components.
- 2. Mistakes, dangers and complications during the transfusion of blood and its components, their prevention and treatment.
- 3. Exchange transfusions, blood reinfusion, transfusion of canned autologous blood, bone marrow transplantation.
 - 4. Transfusion of carriers of blood gases (erythrocyte mass).
- 5. Transfusion correctors of hemostasis and fibrinolysis (blood plasma, platelet mass, cryoprecipitate).
- 6. Transfusion of immunity correction agents (leukovzvesz, plasma of the directed anti-infective action). Blood products and their transfusion.
- 7. Blood substitutes, purpose and classification. Blood substitutes for hemodynamic, detoxification, parenteral nutrition and regulation of ionic equilibrium.
 - 8. Blood transfusion technique, complications and their prevention and treatment.
 - 9. Donation, organization. Contraindications to donation.

Theme 11. Thermal and chemical burns.

Ouestions:

- 1. Thermal burns. Classification according to the degree and stages of flow.
- 2. Methods for determining the area of destruction.
- 3. Disorders of the body during thermal burns (shock, toxicosis, plasma loss).
- 4. Features of shock during thermal burns.
- 5. Complications of thermal burns (purulent complication, sepsis).

6. First aid for thermal burns.

Form A 19 from 44





- 7. Burn disease. Treatment, outcomes.
- 8. Organization and work of specialized burn wards and centers.
- 9. Chemical burns of the skin. Causes, first aid and treatment. Chemical burns of the esophagus, clinic, first aid.

Theme 12. Cold injury and electric shock.

Questions:

- 1. Frostbite, causes, classification by degrees and area of damage.
- 2. Modern views on the pathogenesis of frostbite.
- 3. Symptoms of frostbite in the pre-reactive and reactive periods.
- 4. First aid and treatment for frostbite. Technique of imposing thermoisolating dressings.
- 5. Chills and freezing, symptoms, first aid and treatment.
- 6. Electrotrauma. Causes, local and general effects of electric current on the body. Electric burns, their features.
 - 7. First aid and treatment for electrical injuries.

Theme 13. Wounds, wound process, clinical manifestations, first aid, treatment. Treatment of wounds, its types, types of wound healing. Infected wounds.

Questions:

- 1. Wounds, classification by origin and nature of wounds, their localization and relationship to body cavities.
 - 2. Clinical manifestations common to all types of wounds.
 - 3. Clinic of wounds depending on their nature and location.
 - 4. The course of the wound process, depending on its phase.
 - 5. Morphological and biochemical changes in the wound.
- 6. First aid for wounds depending on their nature, complications and attitudes to the body cavities.
 - 7. General principles of treatment of wounds.
- 8. Medical tactics for fresh wounds, depending on the location, nature of wounds and attitude to the body cavities.
 - 9. Primary surgical treatment of wounds. General concepts and its principles.
 - 10. Justification of the primary treatment of wounds, indications, technique, results.
 - 11. Features of primary treatment of wounds, depending on the nature of the wound.
 - 12. Features of treatment and tactics for wounds penetrating into the body cavity.
- 13. Features of treatment of wounds depending on related complications (bleeding, bone fractures, hematomas).
 - 14. Types of stitches: primary, primary delayed, secondary and secondary delayed.
 - 15. General principles of treatment of infected wounds.
- 16. General and local treatment of infected wounds. Wound drainage methods: active, passive, flow-suction and vacuum drainage of wounds.
 - 17. Features of primary surgical treatment of bitten wounds.

Theme 14. Desmurgy.

Questions:

- 1. General concepts of desmurgy.
- 2. Classification of dressings depending on their type and name.
- 3. Screw dressings, their types, the technique of applying to individual areas of the body.
- 4. Kanova bandages, their types and overlay technique.
- 5. Adhesive dressings, their purpose and technique of imposition.
- 6. Bandages on the body.

Form A 20 from 44



7. Bandages on the lower extremities. 8. Headbands.

Topic 15. Parasitic surgical diseases.

Questions:

- 1. The concept of surgical parasitic diseases.
- 2. Echinococcosis. Brief ideas about the development cycle of the parasite. Ways of infection. Prevention of echinococcosis.
 - 3. Morphological forms of echinococcosis in humans.
 - 4. Diagnosis of echinococcal cyst in the liver, lungs and other internal organs.
 - 5. Surgical treatment of echinococcosis.
 - 6. Alveococcosis: causes, diagnosis, surgical treatment.
- 7. Ascariasis. Brief ideas about the development cycle of the parasite. Ways of infection. Prevention of ascariasis.
 - 8. Clinical manifestations of "surgical" ascariasis.
 - 9. Surgical treatment of surgical complications of ascariasis.
 - 10. Opisthorchiasis damage to the liver, gallbladder, pancreas trematodes.
 - 11. Ways of infection of opisthorchiasis. Prevention of opisthorchiasis.
 - 12. The clinical picture, diagnosis, surgical treatment of complications of opisthorchiasis.

Theme 16. Basics of surgical oncology. Tumors.

Questions:

- 1. Benign and malignant tumors.
- 2. Pre-cancerous diseases.
- 3. General concepts about tumors, benign and malignant tumors, tumor classification, classification of tumors according to various criteria, including the TMNP system. Organization of cancer care.
- 4. Clinic of tumors and methods of their diagnosis (x-ray, endoscopic, histological, cytological, ultrasound).
- 5. Pre-cancerous diseases. The need and importance of early diagnosis of malignant tumors.
- 6. Clinic of connective tissue tumors: benign (fibroma, lipoma, chondroma, osteoma) and malignant (sarcoma).
- 7. Clinic of tumors from muscular, vascular and nervous tissue (fibroids, angiomas, gliomas, neuromas, ganglioneuromas).
- 8. Clinic of tumors of epithelial origin: benign (papilloma, adenoma, cystadenoma, dermoid) and malignant (cancer).
 - 9. Surgical treatment of tumors. The possibilities of endoscopic operations.
- 10. Radiation, chemotherapy, hormonal and combined treatment of tumors the basic concepts.
 - 11. Treatment outcomes of tumor processes.

Theme 17. Malformations

Questions:

- 1. The concept of congenital pathology.
- 2. Congenital malformations of the head.
- 3. Anomalies of the face and oral cavity.
- 4. Congenital fistula and cysts of the neck. Torticollis.
- 5. Spinal defects.
- 6. Congenital tumors of the sacrococcygeal region.
- 7. Congenital malformations of the chest and chest organs.

Form A 21 from 44



- 8. Congenital abdominal defects.
- 9. Congenital heart defects.
- 10. The concept of surgical treatment of malformations.

Theme 18. Plastic and reconstructive surgery. Transplantology.

Questions:

- 1. The concept of corrective surgery.
- 2. The concept of plastic surgery.
- 3. The concept of reconstructive surgery.
- 4. Restorative anatomical and functional disorders of organs and systems.
- 5. Corrective surgery of the consequences and complications of diseases.

Theme 19. Examination of the surgical patient.

Form conducting - business and role-playing game.

Questions

- 1. General clinical research methods: survey, examination, palpation and auscultation.
- 2. Measurement of organs and body parts.
- 3. Measurement of the shape of the body part.
- 4. Measurement of body temperature.
- 5. Blood pressure measurement.
- 6. Pulse measurement.
- 7. Special research methods.
- 8. Interpretation of laboratory research methods.
- 9. Interpretation of functional research methods.
- 10. Interpretation of radiological methods.
- 11. Interpretation of endoscopic research methods.
- 12. Interpretation of ultrasound methods.
- 13. Interpretation of radioisotope research methods.
- 14. Interpretation of computed tomography.
- 15. Interpretation of magnetic resonance imaging.

Theme 20. Bone fractures. Treatment of bone fractures.

Form holding - practical lesson

Questions:

- 1. Bone fractures: causes, mechanisms, classification.
- 2. Fractures of large bones: clinic, diagnosis, complications.
- 3. Features of the clinical signs of fractures of large bones, depending on the location (thigh, shin, shoulder, forearm).
- 4. Features of mechanisms and clinic fractures of lamellar bones (ribs, skull, pelvis).
- 5. Some features of the mechanisms and clinic fractures of small bones (spine, foot, hand).
- 6. First aid for closed fractures of large bones.
- 7. Features of first aid for open bone fractures.
- 8. Features of first aid and treatment for fractures of the lamellar and small bones of the pelvis (hand, foot, pelvis, ribs, spine).
- 9. General principles of treatment of closed and open fractures of large tubular bones.
- 10. Traumatic amputation of bones and soft tissues, methods of preserving amputated segments for replantation. Methods of microsurgery during replantation.
- 11. Indications for treatment of fractures of large bones with plaster casts, skeletal traction, the use of osteosynthesis and compression-distraction apparatus.
- 12. Surgical treatment of fractures of large bones: indications, methods.

Form A 22 from 44



13. Features of the treatment of fractures of lamellar and small bones.

F-Educational plan of the dicipline

- 14. Morphological changes in the fracture zone at different times. Bone callus formation.
- 15. Causes of delayed fusion of bone fractures and the formation of false joints. Treatment of patients in such cases.
- 16. Gypsum, its properties, storage, inspection and quality control.
- 17. Plaster dressings, their types and use.

Theme 21. Dislocation of joints.

Form holding - practical lesson

Questions:

- 1. Dislocations: causes, mechanisms, classification.
- 2. Clinic, diagnosis, first aid and treatment of shoulder dislocations.
- 3. Clinic, diagnosis, first aid and treatment of other dislocations.
- 4. Complications of dislocations, their signs and treatment.
- 5. Hemarthrosis. Technique puncture large joints. Other indications for puncture of the joints.
- 6. Types of standard tires and their application. Rules of immobilization for dislocation of bones.

Theme 22. Damage to soft tissue. Prolonged Syndrome

and positional compression syndrome.

Form holding - practical lesson

Questions:

- 1. Closed soft tissue injuries (bruises, strains, tears): causes, mechanisms. Hematomas: treatment, methods of puncture.
- 2. Symptoms of soft tissue injuries: first aid, treatment.
- 3. Signs of rupture of the ligamentous apparatus of the joints: first aid and treatment. Hemarthrosis: methods of puncture of the joint cavity.
- 4. Soft tissue tears, their clinic, first aid and treatment.
- 5. Outcomes of soft tissue damage
- 6. Syndrome of prolonged compression (VTS) and the syndrome of positional compression: the concept, causes of pathogenesis.
- 7. Clinical signs of VTS and positional compression syndrome.
- 8. First aid, treatment and outcomes VTS.

Theme 23. Transport immobilization.

Uniform holding is a business game.

Questions:

- 1. Transport and therapeutic immobilization, the concept and their goals.
- 2. Types of tires for transport immobilization.
- 3. The use of available tools and standard tires for transport immobilization. The technique of their imposition.
- 4. Indications for use of transport immobilization.
- 5. Immobilization rules.
- 6. Features of transport immobilization for fractures of large bones.
- 7. Transport immobilization for fractures of the pelvic bones
- 8. Transport immobilization for spinal fractures.
- 9. Possible complications of transport immobilization.

Theme 24. Injuries to the skull, chest and abdomen.

Uniform holding is a business game.

Form A 23 from 44



Questions:

- 1. Injuries of the skull: classification, clinic, diagnosis.
- 2. First aid. First aid, treatment. Spinal (lumbar) puncture: indications, technique.
- 3. Breast injuries: classification, complications, clinic.
- 4. First aid and treatment for injuries of the chest.
- 5. Complications of injuries of the chest (pneumothorax, hemothorax).
- 6. Indications and techniques of pleural puncture and drainage of the pleural cavity.
- 7. Heart damage: clinic, first aid, treatment.
- 8. Puncture and drainage of the pericardial cavity, indications, technique.
- 9. Abdominal injuries: classification, clinic, diagnosis, first aid, treatment.
- 10. Laparocentesis: indications, technique.
- 11. Laparoscopy: indications.
- 12. Puncture and drainage of the bladder: indications, technique.

Theme 25. Acute purulent infection. Common questions, problems.

Purulent diseases of the skin and subcutaneous tissue.

Form holding - practical lesson

Questions:

- 1. Etiology of acute purulent infection. Pathogens.
- 2. Pathogenetic mechanisms of acute purulent infection.
- 3. General and local reaction of the body. Clinical signs are common to all forms of acute purulent infection.
- 4. Principles of general and local treatment of acute purulent infection.
- 5. Principles of antibiotic therapy.
- 6. The use of antiseptics and enzymes.
- 7. Folliculitis.
- 8. Furuncle, furunculosis.
- 9. Carbuncle and carbuncle. Etiopathogenesis, clinic, treatment.
- 10. Hydradenitis. Etiopathogenesis, clinic, treatment.
- 11. Abscesses of different locations.
- 12. Phlegmons of different localizations. Etiopathogenesis, clinic and treatment.
- 13. Empyema: the concept and its types.
- 14. Purulent diseases of cellulose spaces (phlegmon of the neck, subfascial and intermuscular phlegmons of the extremities, axillary and subpectoral phlegmons). Clinic, treatment.
- 15. Purulent mediastinitis: causes, clinic, diagnosis, treatment.
- 16. Purulent paranephritis and paracolitis: causes, clinic, treatment.
- 17. Purulent paraproctitis: classification, clinic, treatment. Pararectal fistula.
- 18. Erysipelas of the skin: etiopathogenesis, classification, clinic, diagnosis, prevention.

Theme 26. Acute purulent diseases of soft tissues and glandular organs and lymph nodes.

Form holding - practical lesson

Questions:

- 1. Lymphangitis, concept, form, clinic and treatment.
- 2. Lymphadenitis, types.
- 3. Adenoflegmon: concept, forms, clinic and treatment.
- 4. Mastitis: concept, factors contributing to the disease. Classification of mastitis.
- 5. Clinic and diagnosis of mastitis. Treatment of mastitis.
- 6. Mumps: causes, clinic, treatment.
- 7. Prostatitis: causes, clinic, treatment.

Form A 24 from 44



Theme 27. Acute purulent-destructive diseases of the abdominal organs.

Purulent inflammatory diseases of the serous cavities.

Form holding - operational game

Questions:

- 1. Acute purulent-destructive diseases of the abdominal organs, as the cause of peritonitis.
- 2. Peritonitis: concept, classification.
- 3. Etiopathogenesis of peritonitis.
- 4. Clinic and diagnosis of purulent peritonitis.
- 5. Treatment of peritonitis. Methods of sensing the stomach, small and large intestines. Methods of drainage of the abdominal cavity.
- 6. Pleurisy. Clinical signs and diagnosis of pleurisy
- 7. Pleural empyema: concept, classification.
- 8. Meningitis, as a surgical pathology.

Theme 28. Acute purulent diseases of bones, joints, feet.

Form holding - practical lesson

Questions:

- 1. Hematogenous osteomyelitis: concept and classification.
- 2. Etiology and pathogenesis of acute hematogenous osteomyelitis.
- 3. Clinic and diagnosis of acute hematogenous osteomyelitis.
- 4. Treatment of acute hematogenous osteomyelitis.
- 5. Traumatic and postoperative osteomyelitis. Etiology, pathogenesis, clinical features, diagnosis and treatment.
- 6. Primary chronic forms of osteomyelitis, etiopathogenesis, clinic and treatment.
- 7. Chronic osteomyelitis. Etiopathogenesis, clinic, diagnosis and treatment.
- 8. Acute suppurative arthritis. Classification, clinic, treatment. Technique puncture joints and arthrotomy.
- 9. Purulent diseases of the hand and fingers, causes.
- 10. Classification of felon and phlegmon brush.
- 11. Clinic of acute purulent diseases of the hand and fingers.
- 12. Treatment of felon and phlegmon of the hand.
- 13. Diabetic foot: concept, forms, clinic, treatment.

Theme 29. Sepsis, anaerobic clostridial and non-clostridial soft tissue infections.

Form holding - practical lesson

Questions:

- 1. The concept of sepsis, classification.
- 2. Etiopathogenesis of sepsis.
- 3. Clinic and diagnosis of sepsis.
- 4. Treatment of sepsis.
- 5. Modern methods of bacteriological confirmation of sepsis.
- 6. Anaerobic clostridial infection: etiology, pathogenesis, pathogens, patho-anatomical picture.
- 7. Clinic and diagnosis of various forms of anaerobic infection.
- 8. General and local treatment of anaerobic infection.
- 9. Anaerobic non-clostridial infection: etiopathogenesis, clinical presentation, diagnosis and treatment.

10. Treatment of anaerobic non-clostridial soft tissue infection.

Form A 25 from 44



Theme 30. Acute specific infection.

Form holding - practical lesson

Ouestions:

- 1. Etiology and pathogenesis of tetanus.
- 2. Clinic and diagnosis of tetanus.
- 3. Treatment of tetanus.
- 4. Emergency and routine prevention of tetanus.
- 5. Anthrax. Etiopathogenesis, clinical features and treatment.
- 6. Diphtheria wounds. Etiopathogenesis, clinic, diagnosis and treatment.
- 7. Rabies. Etiopathogenesis, clinic, prevention.
- 8. Candidomycosis (candidiasis), causes, forms, clinic, diagnosis, treatment.
- 9. Emergency prevention of tetanus.
- 10. Emergency prevention of rabies
- 11. Introduction of sera and vaccines by uncommon

Theme 31. Chronic specific infection.

Form holding - practical lesson

Questions:

- 1. Chronic tuberculosis. Notion Modern problems.
- 2. Surgical forms of pulmonary tuberculosis. Clinic, treatment.
- 3. Osteo-articular tuberculosis: classification, pathogenesis.
- 4. Stages of osteo-articular tuberculosis.
- 5. The clinical course of osteo-articular tuberculosis (general and local symptoms).
- 6. Peculiarities of the course of the pre-arthritic, arthritic and post-arthritic stages. Complications. Features puncture sinter abscesses.
- 7. Features of the course of individual forms of osteo-articular tuberculosis (spondylitis, coxitis, drives).
- 8. Surgical treatment of individual forms of bone and joint tuberculosis.
- 9. Tuberculosis of lymph nodes (peripheral and intrathoracic).
- 10. Bone syphilis: clinic, differential diagnosis with osteomyelitis and bone tuberculosis.
- 11. Actinomycosis: the main localization, pathogenesis, clinic, diagnosis and treatment.

Theme 32. Basics of circulatory disorders (necrosis, gangrene, ulcers and fistula).

Form holding - practical lesson

Questions:

- 1. Deaths: the concept, causes and conditions conducive to the development of the disease.
- 2. Types of death. Features clinic dry and wet gangrene.
- 3. General and local treatment of necrosis, prevention.
- 4. Certain types of circulatory disorders, the concept of them, the value of collateral circulation.
- 5. Thrombosis and embolism: etiopathogenesis, clinic, treatment.
- 6. Obliterating atherosclerosis, obliterating endarteritis, thromboangiitis obliterans (Buerger's disease): etiopathogenesis, clinical presentation, diagnosis and treatment.
- 7. Trophic ulcers (varicose, post-traumatic, cicatricial, post-burn, etc.). Etiopathogenesis, clinic and treatment.
- 8. Bedsores: causes, clinic, treatment and prevention.
- 9. Fistulas: types, etiopathogenesis, prevention and treatment.
- 10. Lymphostasis: causes, clinic and treatment.

Form A 26 from 44



Theme 33. Basics of surgery for circulatory and lymph circulation disorders of the extremities.

Form holding - practical lesson

Questions:

- 1. Acute arterial insufficiency of the extremities. Definition, clinic, diagnosis, treatment.
- 2. Chronic arterial insufficiency of the extremities. Definition, clinic, diagnosis, treatment. Stage.
- 3. Critical lower limb ischemia.
- 4. Acute venous insufficiency of the extremities. Definition, clinic, diagnosis, treatment.
- 5. Chronic venous insufficiency of the extremities. Definition, clinic, diagnosis, treatment.
- 6. Disorder of lymph circulation.

Theme 34. Surgery. Preoperative preparation of patients.

Form holding - practical lesson

Questions:

- 1. The concept of surgery, types of surgery.
- 2. Stages of surgery.
- 3. Anatomical and pathophysiological rationale for surgical operations.
- 4. The volume of study of the patient during planned and emergency operations.
- 5. Features and scope of research of patients, depending on the patient's age, area and organ from which the operation is performed.
- 6. Justification of indications for emergency and planned operations.
- 7. Preparation of organs and body systems for surgery, depending on the urgency and volume of the operation, the nature of the underlying disease
- 8. Monitoring the patient during the operation. Modern methods and equipment for monitoring the condition of the patient.

Theme 35. Post-operative period.

Form conducting - an interactive form-learning game: work in small groups.

Questions:

- 1. The postoperative period: the concept, pathophysiological changes in the body in this period.
- 2. Methods of monitoring patients in the postoperative period. Opportunities and methods of monitor surveillance.
- 3. Possible early postoperative complications from the postoperative wound and the operated organ and area. Their signs and diagnosis. Features after operations on the organs of the abdominal, pleural cavities, soft tissues and bones.
- 4. Late postoperative complications from the postoperative wound, the operated organ and the region, their clinical picture and diagnosis.
- 5. Complications of the internal organs, cardiovascular system, lungs, liver, kidneys and neuro-psychological sphere of the patient in the postoperative period, their signs and diagnosis.
- 6. Thromboembolic complications, risk factors, their occurrence, causes, clinical presentation, prevention and treatment.
- 7. Nutrition of patients and the value of care after surgery and the value of early activation of patients for the prevention of complications.
- 8. Treatment of complications arising from the operated organ or area.

Theme 36. History of the disease. Diagnostic algorithm. Epicrisis.

Form A 27 from 44



Form conducting - an interactive form-learning game: work in small groups. Questions:

- 1. Analysis and discussion of case histories written by each student.
- 2. Algorithm concept and types.
- 3. Epicrisis the concept and types.

7. labs WORKSHOPS

This type of work is not provided Curriculum (NC).

8. SUBJECTS course, control works, abstracts

This type of work is not provided Curriculum (NC).

9. Questions for exam

- 1. Aseptic, concept, endogenous and exogenous sources of infection. Intrahospital infection, concept, prevention. Orders of the Ministry of Health of the Russian Federation regulating the implementation of measures to prevent purulent infection.
- 2. Antiseptic, concept, species. Ideological predecessors of antiseptics (L.Paster, N.I. Pirogov) and its creators (I.Zemmelweis, D.Lister). Antiseptics and proteolytic enzymes, classification, methods of application.
- 3. Prevention of air and droplet infection. Organization of the surgical department (wards, dressing rooms, operating unit). Cleaning in the operating room, its types.
- 4. Prevention of contact infection. Surgical instruments: classification, features of the device, care, sterilization.
- 5. Prevention of contact infection. Operating linen, operating and dressing materials, requirements for them, their types, sterilization. Autoclave: its device and work.
- 6. Prevention of contact infection: preparation of the surgeon's hands for surgery, their methods, sterilization of gloves, preparation of the operating field.
- 7. Prevention of implantation (implanted) infection. Suture and alloplastic materials: their types, basic requirements for suture material. Sterilization.
- 8. Characteristics of blood groups. Methods and methods of their determination, errors, their classification and ways of warning.
- 9. Rh factor and blood cell factor, antigenic structure, importance in surgery, donation in obstetrics, gynecology and pediatrics, methods of determination.
- 10. Bleeding and blood loss, concept, classification, causes. The reaction of the body to blood loss, pathophysiological and compensatory mechanisms, developing at the same time. Mechanisms of hemostasis, methods of its study.
- 11. Methods of stopping bleeding: temporary and final (mechanical, chemical, physical, biological). Treatment of hemorrhage.
- 12. Indications and contraindications for transfusion of blood and its components. Compatibility tests. The mechanism of action of transfused blood and its components.
- 13. Errors, dangers and complications in blood transfusion: classification, clinic, treatment.

Form A 28 from 44



- 14. Blood substitutes and plasma substitutes (hemocorrectors), classification, indications for use, complications in transfusion and their prophylaxis.
- 15. Blood preparations: types, indications for use.
- 16. Modern concepts of blood transfusion. Components of blood: their characteristics, storage conditions, indications for use. Ways and methods of transfusion of blood and its components.
- 17. Sources of blood for transfusion (reinfusion, autotransfusion, donor blood). Donation.
- 18. Lymphostasis, the main causes, diagnosis and treatment.
- 19. Water-electrolyte and acid-base disorders in surgical patients, causes, clinic, diagnosis, correction Endogenous surgical intoxication, causes, clinic, diagnosis, conservative and surgical treatment. Methods detoxification.
- 20. General anesthesia, its types, the effect of narcotic substances on the body.
 Preparation for general anesthesia, premedication. Clinical course of anesthesia.
- 21. Local anesthesia, its types, the drugs used, their pharmacodynamics, indications, contraindications, dangers and complications.
- 22. Intravenous anesthesia, drugs used for it. Indications, contraindications, complications.
- 23. Muscle relaxants, indications for use, mechanism of action, complications.
- 24. Inhalation anesthesia, its kinds, indications, complications and struggle with them.
- 25. Neuroleptanalgesia (NLA): indications, drugs used for it.
- 26. Equipment for anesthesia and artificial ventilation (IVL), methods of mechanical ventilation. Principles of anesthesia apparatus.
- 27. Resuscitation, concept. Ways to restore cardiovascular and respiratory activities in the provision of first aid and in the treatment in intensive care units.
- 28. Terminal states, clinical characteristics, first aid and treatment.
- 29. Wounds, classification. Morphological and biochemical changes in the wound. Are common principles of treatment of fresh wounds.
- 30. Primary surgical treatment of wounds, its terms and their justification, technique. Types of seams.

used in the initial surgical treatment of wounds.

- 31. Treatment of festering wounds, treatment and methods of their treatment.
- 32. Bitten wounds: clinical manifestations, peculiarities of treatment, complications.
- 33. Penetrating wounds of the pleural cavity, complications, first aid, treatment.
- 34. Traumatism: concept, causes, classification, organization of first aid and treatment
- 35. Shock, its types, pathogenesis, clinic, diagnosis, first aid and treatment traumatic shock.
- 36. Shock, its types. Traumatic shock, etiopathogenesis, clinic, diagnosis, treatment, prevention.
- 37. Thermal burns and burn disease, classification, disorders of the body with burns, determination of the area and degree of burn, first aid and treatment of burn disease.
- 38. Electrical injury: etiopathogenesis, classification, local and general manifestations, the first help and treatment.

Form A 29 from 44



- 39. Frostbites: etiopathogenesis, classification, clinic, first aid, treatment, prevention.
- 40. Chemical burns of skin and mucous membranes: causes, features of acid burns and alkalis, first aid and treatment.
- 41. Injuries to the chest and organs in it: a clinic, first aid, treatment.
- 42. Injuries of the abdominal cavity and its organs: mechanism, clinic, diagnosis, first aid and treatment.
- 43. Closed fractures of long bones: biomechanism, classification, general and local phenomena, clinic, diagnostics.
- 44. Open fractures of long bones: the features of the clinic, first aid and treatment, complications and their treatment.
- 45. Closed injuries of soft tissues (bruises, sprains, tears), mechanism, clinic, first aid, treatment.
- 46. Delayed consolidation and false joints in the treatment of bone fractures: causes, treatment.
- 47. Transport immobilization in bone fractures, types of immobilizing materials, rules of immobilization.
- 48. The syndrome of prolonged compression and the syndrome of positional compression, causes, pathogenesis,
 - clinic, classification, first aid, treatment.
- 49. Functional method of treatment of bone fractures: species, indications for use.
- 50. Compression-distraction osteosynthesis: its place in the treatment of bone fractures, indications for use.
- 51. Gypsum: its properties, determination of suitability, plaster casts, species, indications to application, complications.
- 52. Dislocation of joints: biomechanism, types of dislocations of individual joints, clinic, diagnosis, first aid, treatment.
- 53. Bedsores: concept, cause, signs, treatment, prevention.
- 54. Acute purulent diseases, general issues of etiopathogenesis, stages, classification, clinic, diagnosis, treatment and prevention.
- 55. Acute purulent diseases of the skin and subcutaneous fat (furuncle, furunculosis, carbuncle, hydradenitis, abscesses, phlegmon): etiopathogenesis, clinic, treatment.
- 56. Purulent processes of the cellulose tissue of the retroperitoneal space and the pelvis, purulent paranephritis.
- 57. Acute purulent diseases of the hand and fingers: etiopathogenesis, classification, clinic, treatment, prevention.
- 58. Subfascial and intermuscular phlegmons of the extremities, phlegmon of the foot, cause, clinic, diagnosis and treatment.
- 59. Axillary and subjectoral phlegmon, causes, clinic, diagnosis and treatment
- 60. Purulent diseases of glandular organs (parotitis, pancreatitis, prostatitis), causes, clinic, diagnosis and treatment.
- 61. Acute purulent-destructive diseases of the abdominal cavity and peritonitis:

Form A 30 from 44



- etiopathogenesis, clinic, diagnosis, treatment.
- 62. Purulent and purulent-destructive diseases of the lungs and pleural cavity: etiopathogenesis, classification, clinic, diagnosis, treatment.
- 63. Lymphangitis, lymphadonitis, adenoflegion, etiopathogenesis, clinic, treatment.
- 64. Neck phlegmon, causes, clinic, diagnosis, treatment.
- 65. Mastitis: etiopathogenesis, classification, clinic, diagnosis, treatment, prevention.
- 66. Erysipelatous skin inflammation: etiopathogenesis, classification, clinic, treatment.
- 67. Surgical forms of pulmonary tuberculosis and tuberculous lymphadenitis, forms, clinic, diagnosis, treatment.
- 68. Anaerobic gas gangrene, pathogens, pathogenesis, clinic, treatment, prevention.
- 69. Purulent arthritis and bursitis, cause, clinic, diagnosis, treatment.
- 70. Acute and chronic paraproctitis, causes, clinic, diagnosis and treatment.
- 71. Inflammatory diseases of veins (phlebitis, thrombophlebitis, phlebothrombosis), the cause, clinic, diagnosis, treatment.
- 72. Antibiotic therapy for purulent surgical diseases, indications, complications and modern problems.
- 73. General purulent infection (sepsis), etiopathogenesis, classification, clinic, diagnosis, treatment and prevention.
- 74. Osteomyelitis: concept, etiopathogenesis, classification, clinic, diagnosis and treatment.
- 75. Syphilis of bones and joints: clinic, differential diagnostics with osteomyelitis and tuberculosis, treatment.
- 76. Tuberculosis of the spine: a clinic, diagnostics, treatment.
- 77. Tuberculosis coke and driving: clinic, diagnosis, treatment.
- 78. Purulent meningitis and abscesses of the brain, cause, clinic, diagnosis and treatment.
- 79. Purulent mediastinitis, causes, clinic, diagnosis, treatment.
- 80. Gangrene: concept, causes. Gangrene in vascular diseases of the extremities, causes, clinic, diagnosis, treatment.
- 81. Malformations of the skull, brain and spinal cord. Reason, clinic, diagnosis, principles of treatment.
- 82. Malformations of the development of the cardiovascular system: clinic, diagnosis, treatment.
- 83. Congenital diseases of the neck: clinic, diagnosis, treatment.
- 84. Congenital diseases of the digestive tract: clinic, diagnosis, treatment.
- 85. Malformations of the genitourinary system: types, clinic, diagnosis, treatment.
- 86. Congenital malformations of the spine: a clinic, diagnosis, treatment.
- 87. Congenital malformations of limbs: clinic, diagnosis, treatment.
- 88. General data on tumors, etiopathogenesis, precancerous diseases, classification, Clinic, general principles of diagnosis and treatment.
- 89. Tumors of muscular, vascular and nerve tissue: clinic, treatment.
- 90. Benign tumors of connective tissue: clinic, treatment.
- 91. Benign epithelial tumors: signs, treatment, depending on localization.
- 92. Malignant tumors of connective tissue: clinic, diagnosis, treatment.

Form A 31 from 44



- 93. Tetanus: etiopathogenesis, classification, clinic, treatment, emergency and planned prevention.
- 94. Rabies, etiopathogenesis, prevention and antiepidemic measures.
- 95. Empyema, the concept. Empyema of individual localizations, clinic, diagnosis, treatment.
- 96. Fistulas: concept, classification, clinic, treatment.
- 97. Obliterating arterial diseases of the extremities, thrombosis and embolism: etiopathogenesis, clinic, diagnosis, treatment, complications and their treatment.
- 98. Actinomycosis: etiopathogenesis, basic localization, clinic, treatment. Candidomycosis, causes, treatment.
- 99. Askaridosis and the surgical diseases caused by it: a clinic, treatment.
- 100. Echinococcosis and alveococcosis: etiopathogenesis, clinic, diagnosis, complications, treatment.
- 101. Opisthorchiasis, pathways of infection, clinic, diagnosis, treatment.
- 102. Anthrax and diphtheria of wounds: a clinic, differential diagnostics with purulent diseases, treatment, prevention.
 - 103. Ulcers, the concept. Trophic ulcers of the lower extremities: causes, clinic, treatment.
- 104. Transplantation of tissues, organs and cells: indications, classification of tissues in dependence

from the source of receipt.

- 105. Plastic of the skin, muscles, vessels, nerves, bones: indications, methods.
- 106. Preoperative preparation and its scope, depending on the nature of the operation and its urgency.
- 107. Preoperative period, scope of examination of a patient before surgery, preparation of organs and systems of the body, its features in emergency operations.
- 108. Surgical operation, concept, species, anatomical and physiological substantiation of surgical operations.
- 109. Postoperative period, care of patients, possible complications, their treatment and prevention.
- 110. Catheterization, puncture and drainage of the bladder, indications, technique.
- 111. Puncture and catheterization of peripheral and central veins, indications, techniques, complications.
- 112. Puncture of cavities of joints and bones, indications, technique.
- 113. Puncture and drainage of the pleural cavity, indications, technique.
- 114. Puncture of pericardium, indications, technique, points.
- 115. Puncture of the cavities of the heart, indications, technique.
- 116. Puncture of abdominal cavity laparocentesis, indications, technique, possible complications.
- 117. Lumbar puncture, indications, technique.
- 118. Indications for sensing and draining of the esophagus, stomach, thin and thick intestines. Technique, possible complications.
- 119. Drainage of hollow organs of the abdominal cavity through natural openings and with using operations, indications. Principles of conducting.

Form A 32 from 44



120. Drainage of wounds and body cavities, types of drainage (active, passive, washing and aspiration).

QUESTIONS TO ACCOUNT

- 1. Definition and concept Surgery.
- 2. Antiseptic. Definition of the concept. Types of antiseptics.
- 3. The mechanism of action of antiseptics. Characteristics of basic antiseptics and antibiotics. Methods of use of antiseptic drugs.
- 4. Asepsis. Definition of the concept. The value of asepsis for surgery in modern conditions.
- 5. Sources of infection. The concept of nosocomial, intrahospital, nosocomial infection.
- 6. Organization of the surgical department, its layout, main premises and their device. Chamber, dressing, their equipment and cleaning.
- 7. Operational unit, its device and equipment. Cleaning in the operating room, its types.
- 8. Orders and instructions of the Ministry of Health of the Russian Federation on the prevention of intra-hospital infection. The essence of the orders.
- 9. Dressings: its types and basic properties. Requirements for dressings.
- 10. Training of hands of the personnel for operation.
- 11. Preparation of the surgical field.
- 12. Suture material, its types and purpose, classification by source. Requirements.
- 13. Autoplastic and homoplastic materials used in surgery and traumatology and their sterilization.
- 14. General anesthesia (anesthesia). Types of anesthesia as prescribed. The mechanism of action of drugs on the body (the theory of anesthesia).
- 15. The clinical course of anesthesia in stages.
- 16. Mask anesthesia. Indications, contraindications and complications.
- 17. Endotracheal anesthesia. Indications, contraindications and complications.
- 18. Intravenous anesthesia. Indications, contraindications and complications.
- 19. Local anesthesia. Methods of local anesthesia. Indications, contraindications and complications.
- 20. Conductive, spinal and epidural anesthesia. Indications, contraindications and complications.
- 21. Neuroleptanalgesia. Indications, contraindications and complications, drugs used.
- 22. Methods of management of vital body functions (artificial hypotension, hypothermia).
- 23. Reanimation. Notion Vital functions of the body, their types and causes of violations, their types.
- 24. The concept of bleeding and blood loss. The hemostasis system is normal.
- 24. Classification of bleeding.
- 26. Temporary methods to stop bleeding.
- 27. Methods for the final stop of bleeding. Treatment of blood loss.
- 28. Central venous pressure (CVP). The method of determination and value for determining the volume of blood loss and the degree of dehydration.
- 29. The hemostasis system is normal. Methods for the study of hemostasis. Thromboembolic complications, causes, clinical presentation, treatment and prevention.
- 30. Hemorrhagic syndrome in surgery. DIC or TGS-syndrome.
- 31. The concept of endogenous intoxication and its main types in surgical patients.

Form A 33 from 44



- 32. Effective detoxification methods. Concept, types, indications.
- 33. Introductory electrolyte disorders in surgical patients, causes. Methods for correcting electrolyte-induced disturbances, used solutions.
- 34. Erythrocyte and plasma factors of blood groups (agglutinogens and agglutinins). Designations of blood types.
- 35. The method of determining blood groups. Errors in the determination of blood groups.
- 36. Rh factor, its value, the method of determination.
- 37. Compatibility tests. Methods of conducting tests.
- 38. Thermal burns. Classification by degrees and stages of flow. Methods for determining the area of destruction.
- 39. First aid for thermal burns. Complications of thermal burns.
- 40. Chemical burns of the skin. Causes, first aid and treatment. Chemical burns of the esophagus, clinic, first aid.
- 41. Frostbite, causes, classification by degrees and area of damage.
- 42. First aid and treatment for frostbite. Technique of imposing thermoisolating dressings. Freezing, symptoms, first aid and treatment.
- 43. Electric shock. Causes, local and general effects of electric current on the body. First aid and treatment for electrical injuries.
- 44. Wounds, classification by origin and nature of wounds, their localization and relationship to the cavities of the body.
- 45. The course of the wound process, depending on its phase.
- 46. First aid for wounds, depending on their nature, complications and attitudes to the body cavities. General principles of treatment of wounds.
- 47. Primary surgical treatment of wounds. General concepts and its principles.
- 48. General principles of treatment of infected wounds. General and local treatment of infected wounds. Wound drainage methods.
- 49. Developmental impairments: concept, classification, treatment principles.
- 50. Transplantology. Basics of plastic surgery.
- 51. Tumors: definitions and features of tumors of different tissues.
- 52. Parasitic diseases: classification and main differences.
- 53. Desmurgy. Bandages on the body and abdomen.
- 54. Desmurgy. Headbands.
- 55. Desmurgy. Bandages on the limbs.

10. Self study TRAINEES

Content requirements, conditions and procedures for the organization of independent work of students, taking into account forms of training are determined in accordance with the "Regulation on the organization of independent work of students," approved by the Scientific Council of USU (Minutes $N_28 / 268$ from 26.03.2019g.).

Subject. History of the development of surgery.

Form A 34 from 44



- 1. Stages of the development of surgery
- 2. Evolution of surgical instruments

Subject . Asepsis. Prevention of implant infection. Sterilization of suture and plastic material.

- 1. Importance of implant infection in modern surgery.
- 2. Suture material, its types and purposes, classification by source of receipt. Requirements to be met.
- 3. Methods of sterilization of silk.
- 4. Methods for sterilizing catgut.
- 5. Methods of sterilization of hair, capron and other types of suture material.
- 6. Resorbable suture material.

Subject. General questions of anesthesiology.

- 1. History of the emergence of general anesthesia.
- 2. The main stages of the development of anesthesia.
- 3. Local infiltration anesthesia according to Vishnevsky.

Subject. Endogenous intoxication in surgery. Principles of its elimination.

- 1. The main types of surgical diseases causing endotoxicosis.
- 2. The importance of laboratory indicators for various types of endotoxicosis.
- 3. Modern efferent methods of detoxification.

.Subject. Water-electrolyte disturbances in surgery

- 1. Water sectors of the body.
- 2. Methods of correction of water-electrolyte disturbances, applied solutions.
- 3. Dangers and complications in transfusion of plasma-substituting solutions.
- 4. Preparations for parenteral nutrition for the purpose of correction of protein metabolism

Subject. Blood type and Rh factor. Transfusion of blood components.

- 1. Historical data. The concept of science transfusiology.
- 2. Methods for determining blood groups used in clinical practice ..
- 3. Rhesus factor, causes of hemolytic disease of newborns,
- 4. Order No. 363 on the approval of instructions for the use of blood components.
- 5. Modern methods of blood preservation.
- 6. The mechanism of action of transfused blood.

Subject. Transfusion of blood components. Errors and complications. Donation.

- 1. Benefits of blood reinfusion, the use of canned autoblood in modern surgery ..
- 2. Transfusion of means of correction of immunity (leukovzves, plasma of directed anti-infective action). Blood products and their transfusion.
- 3. Blood substitutes, purpose and classification. Blood substitutes for hemodynamic, detoxification, parenteral nutrition and regulation of ionic equilibrium.
- 4. The technique of blood transfusion transfusion, complications and their prevention and treatment.
- 5. Donation, organization. Contraindications to donation.

Subject. Modern blood substitutes.

- 1. Blood substitutes for hemodynamic action.
- 2. Blood substitutes for detoxification.
- 3. Modern preparations for parenteral nutrition.

Form A 35 from 44





Subject. Electrothrauma.

- 1. Peculiarities of electric trauma, depending on the magnitude and type of the damaging current.
- 2. Features of electric injury when struck by lightning.
- 3. Application of the defibrillator in clinical practice.
- 4. Safety precautions for a robot with a defibrillator.

Subject. Acute purulent-destructive diseases of the abdominal organs. Purulent inflammatory diseases of serous cavities.

- 1. Clinical symptoms, purulent-destructive diseases of the abdominal organs.
- 2. Clinical signs and diagnostics of pleurisy and pleural empyema.
- 3. Technique of puncture and drainage of the pleural cavity.

Subject. General purulent (sepsis).

- 1. Evolution of the concept of sepsis after the Chicago Conciliation Conference of 1991.
- 2. Modern methods of bacteriological confirmation of sepsis.

Subject. The technique of examination of surgical patients.

- 1. Work with the methodical guidance of writing a surgical case history.
- 2. Study of the scheme of writing the medical history.
- 3. Repetition of the symptomatic section of major surgical diseases.
- 4. Work on writing the Statuslocalis section.

Subject. Acute specific infection.

- 1. Emergency prophylaxis of tetanus
- 2. Emergency prophylaxis of rabies
- 3. The introduction of serums and vaccines by Often

Subject. Common Issues of Developmental Disabilities

- 1. The concept of congenital pathology.
- 2. Congenital malformations of the head, anomalies of the face and mouth, congenital fistulas and cysts of the neck, torticollis, spine defects.
- 3. Congenital tumors of the sacrococcygeal region,
- 4. Congenital malformations of the chest and chest and abdomen.
- 5. The concept of surgical treatment of malformations.

Subject. Surgery of parasitic diseases

- 1. The concept of surgical parasitic diseases.
- 2. Echinococcosis. Brief representations about the cycle of development of the parasite. Ways of infection. Prevention of echinococcosis. Morphological forms of echinococcosis in humans.
- 3. Course of the disease. Diagnosis of an echinococcal cyst in the liver, lungs and other internal organs. Operative treatment of echinococcosis.
- 4. Alveococcosis: causes, diagnosis, surgical treatment.
- 5. Ascaridosis. Brief representations about the cycle of development of the parasite. Ways of infection. Prophylaxis of ascaridosis. Clinical manifestations of "surgical" ascariasis. Surgical treatment of surgical complications of ascaridosis.
- 6. Opisthorchiasis lesions of the liver, gall bladder, pancreas trematodes. Ways of infection. Prevention of opisthorchiasis. Clinical picture, diagnosis, surgical treatment of complications of opisthorchiasis.

Form A 36 from 44



F-Educational plan of the dicipline

11. TRAINING methodical and information Maintenance

a) List of recommended literature

Общая хирургия. Введение в специальность.

1 Гостищев, В. К. General surgery / The manual. - М.: GEOTAR-Media, 2019. - 220 р. - 220 с. - ISBN 978-5-9704-4984-4. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL: https://www.studentlibrary.ru/book/ISBN9785970449844.html

2 Makarov S. V.General Surgery Issues: educational edition for students of 2 course in "Medical business" and "Pediatrics". Part 1 / S. V. Makarov, V. K. Ostrovsky, A. V. Smolkina; Ulyanovsk State University, Institute of Medicine, Ecology and Physical Culture. - Ulyanovsk: UlSU, 2018. - Текст на англ. яз.; Загл. с экрана. - Электрон. текстовые дан. (1 файл: 2,28 МБ). - Текст: электронный.

http://lib.ulsu.ru/MegaPro/Download/MObject/1411

additional

1 Lagoon, M. A. The Course of Faculty (Analitical) Surgery in Pictures, Tables and Schemes / M. A. Lagoon, B. S. Kharitonov, edited by professor S. V. Vertyankin - Москва :ГЭОТАР-Медиа, 2017. - 436 с. - ISBN 978-5-9704-3927-2. - Текст :электронный // ЭБС "Консультантстудента" : [сайт]. - URL : https://www.studentlibrary.ru/book/ISBN9785970439272.html

- 2 Fractures of bones. Dislocations. First aid. Transport immobilization: electronic teaching method. allowance: Study Guide (e-course) / A. V. Smolkina, S. V. Makarov, V. K. Ostrovsky, V. P. Demin. Ulyanovsk: USU, 2018. Загл. с экрана. Электрон. текстовые дан. (1 файл: 0,62 Мб). URL: https://portal.ulsu.ru/course/view.php?id=93894. Режим доступа: Портал ЭИОС УлГУ. Текст: электронный.
- 3 .Resuscitation, reanimation, anesthesia :StudyGuide (e-course) / A. V. Smolkina, S. V. Makarov, V. V. Ggoevikh [etal.]. Ulyanovsk :USU, 2019. Загл. с экрана. Электрон. текстовые дан. (1 файл : 0,42 Мб). URL: https://portal.ulsu.ru/course/view.php?id=91674. Режим доступа: Портал ЭИОС УлГУ. Текст : электронный
- 4 Beloborodov V. A. Venousdisease :Tutorial / V. A. Beloborodov, V. A. Vorobev. Иркутск : ИГМУ, 2021. 84 с. Текст : электронный // ЭБС "Букап" : [сайт]. URL : https://www.books-up.ru/ru/book/venous-disease-15863557/

Educational-methodical

- 1. Smolkina A. V.Methodical instraction of professor for practical training for discipline "General surgery. introduction to specialty " for specialty 05.31.01 "Medical business" / A. V. Smolkina, S. V. Makarov. Ulyanovsk :UISU, 2021. Неопубликованный ресурс; Наангл. яз. URL: http://lib.ulsu.ru/MegaPro/Download/MObject/11212 . Режимдоступа: ЭБС УлГУ. Текст :электронный.
- 2. Smolkina A. V.Guidelines for independent work of students for the discipline «General surgery. introduction to specialty» for specialty 31.05.01 «Medical business» / A. V. Smolkina, S. V. Makarov. Ulyanovsk :UISU, 2021. Неопубликованный ресурс; Наангл. яз. URL: http://lib.ulsu.ru/MegaPro/Download/MObject/11209. Режимдоступа: ЭБС УлГУ. Текст :электронный.

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Form A 37 from 44



в) software:

title agreement

ATP Consultant Plus Contract No.

NEB RF

EBS IPRBooks

AIBS "MegaPro"

System "Anti-plagiarism. University"

Microsoft Windows

Microsoft Office 2016

MyOffice Standard

Automated information system "Vitacor RMIS"

StatisticaBasicAcademicforWindows 13

Form A 38 from 44

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC

Форма



F-Educational plan of the dicipline

в) Профессиональные базы данных, информационно-справочные системы

1. Электронно-библиотечные системы:

1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / OOO Компания «Ай Пи Ар Медиа». - Саратов, [2023]. — URL: http://www.iprbookshop.ru. — Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство «ЮРАЙТ». – Москва, [2023]. - URL: https://urait.ru. –

Режим доступа: для зарегистрир. пользователей. - Текст: электронный.

1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента») : электронно-библиотечная система : сайт / ООО «Политехресурс». — Москва, [2023]. — URL: https://www.studentlibrary.ru/cgi-bin/mb4x. — Режим доступа: для зарегистрир. пользователей. — Текст : электронный.

1.4. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО «Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг». – Москва, [2023]. – URL: https://www.rosmedlib.ru. – Режим доступа: для зареги-

стрир. пользователей. – Текст: электронный.

1.5. Большая медицинская библиотека: электронно-библиотечная система: сайт / ООО «Букап». – Томск, [2023]. – URL: https://www.books-up.ru/ru/library/. – Режим доступа: для зарегистрир. пользователей. – Текст: электронный.

1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС «Лань». — Санкт-Петербург, [2023]. — URL: https://e.lanbook.com. — Режим доступа: для зарегистрир. пользователей. — Текст : электронный.

1.7. ЭБС **Znanium.com** : электронно-библиотечная система : сайт / ООО «Знаниум». - Москва, [2023]. - URL: http://znanium.com . — Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

2. КонсультантПлюс [Электронный ресурс]: справочная правовая система. / ООО «Консуль-

тант Плюс» - Электрон. дан. - Москва: КонсультантПлюс, [2023].

3. Базы данных периодических изданий:

3.1. eLIBRARY.RU: научная электронная библиотека: сайт / ООО «Научная Электронная Библиотека». – Москва, [2023]. – URL: http://elibrary.ru. – Режим доступа: для авториз. пользователей. – Текст: электронный

3.2. Электронная библиотека «Издательского дома «Гребенников» (Grebinnikon) : электронная библиотека / ООО ИД «Гребенников». — Москва, [2023]. — URL: https://id2.action-media.ru/Personal/Products. — Режим доступа : для авториз. пользователей. — Текст : электронный.

4. Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. — Москва, [2023]. — URL: https://нэб.рф. — Режим доступа : для пользователей научной библиотеки. — Текст : электронный.

5. Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». – URL:

http://www.edu.ru. - Текст: электронный.

6. Электронная библиотечная система УлГУ: модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». — URL: http://lib.ulsu.ru/MegaPro/Web. — Режим доступа: для пользователей научной библиотеки. — Текст: электронный.

Согласовано:	W. ypenco	103	, he Cent	2033
лолжность сотрудника УИТиТ	Ф.ИО.		Подпись	Дата

Form A 39 from 44

Ministry of science and high education RF
Ulyanovsk State University
Faculty of Medicine named after Biktimirov T.Z., IMEiPC
F-Educational plan of the dicipline



12. EDUCATIONAL AND METHODICAL AND INFORMATION SUPPORT OF DISCIPLINE

- For practical classes.

Industrial practice rooms located at the clinical bases of the medical faculty named after .. T.Z. Biktimirova UISU:

- 1. 432008, Ulyanovsk region, Ulyanovsk, rn Zasviyazhsky, Likhacheva St., 12 State Healthcare Institution "Central Clinical Medical Unit named after V.A. Egorov (Agreement for the gratuitous use of property).
- 2. 432063, Ulyanovsk Region, the city of Ulyanovsk, Orenburgskaya Street, No. 27 State Healthcare Institution "Central City Clinical Hospital".

- For lectures.

1 ... No 4. Assembly Hall. Auditorium for lectures, seminars and workshops, monitoring and intermediate certification, group and individual counseling. The room is staffed by student board and a set of furniture (seats - 372). Set of multimedia equipment: a computer with Internet access, screen, projector. Wi-Fi access to the network "Internet", EIOS, DEC.

(432048, Ulyanovsk region, Ulyanovsk, rn Rail, str. University Embankment, d. 1, Bldg. 6 (casing 4)

- 2№ 332. Auditorium for lectures, seminars and workshops, monitoring and intermediate certification, group and individual counseling. The room is staffed by student board and a set of furniture (seats 200). Set of multimedia equipment: a computer with Internet access, screen, projector. Wi-Fi access to the network "Internet", EIOS, DEC. (432017, Ulyanovsk region., Ulyanovsk, st. Sviyaga embankment, d. 106 (2 building)
- 3 №209. Auditorium for lectures, seminars and workshops, monitoring and intermediate certification, group and individual counseling. The room is staffed by student board and a set of furniture (seats 187). Set of portable multimedia equipment: laptop, multimedia projector, screen, speakers kolonki. Wi-Fi access to the Internet, EIOS, EBS (432017, Ulyanovsk region, Ulyanovsk, Leninsky district, street. Architect Livchaka d. 2/1)

- For self-study.

- 1 No 22. Service Department of the Institute of Medicine, Ecology and Physical Culture Scientific Library of the zone for independent work, Wi-Fi access to EIOS, DEC. The audience is equipped with specialized furniture to 42 seats and equipped with computers with access to the network "Internet", EIOS, EBS.Ploschad 96.6 sq.m.
- (432017, Ulyanovsk region., Ulyanovsk, st. Sviyaga embankment, d. 106 (2 building)
- 2number 237 reading room, a research library with an area for self-study, Wi-Fi access to EIOS, DEC. The audience is equipped with specialized furniture for 80 seats and is equipped with computers with access to the network "Internet", EIOS, EBS, screen and projector. Area 220.39 sq.m.432017, Ulyanovsk region., Ulyanovsk, st. Embankment Sviyagi, d. 106 (1)

Form A 40 from 44

Форма



case)

13. SPECIAL CONDITIONS FOR STUDENTS WITH DISABILITIES

Training students with disabilities is carried out taking into account the peculiarities of psychophysical development, individual capabilities and health of such students. Education of students with disabilities can be organized in conjunction with other students, and separately. If necessary, students from among persons with disabilities (at the request of the student) may be offered one of the following options for the perception of information, taking into account their individual psychophysical characteristics:

- for persons with visual impairment: in printed form in large print; in the form of an electronic document; in the form of an audio file (translation of educational materials into audio format); in printed form in Braille; individual consultations with the involvement of a special translator; individual tasks and consultations.
- for persons with hearing impairment: in printed form; in the form of an electronic document; video materials with subtitles; individual consultations with the assistance of a sign language interpreter; individual tasks and consultations.
- for persons with musculoskeletal disorders: in printed form; in the form of an electronic document; in the form of an audio file; individual tasks and consultations."
- if it is necessary to use partially or exclusively remote educational technologies in the educational process, the organization of work of teaching staff with students with disabilities is provided in an electronic information and educational environment, taking into account their individual psychological characteristics

Developer

General and operative surgery with topographic anatomy and a course of dentistry Head of the Department, MD, Professor SMOLKINA A.V.

General and operative surgery with topographic anatomy and a course of dentistry Head of the Department, Associate Professor Makarov S.V.

Form A 41 from 44

Форма



LIST OF CHANGES of №

Speciality 31.05.01. «General medicine»

Disciplines	General surgery. Introduction to the specialty

Nº	Content of the change or a link to the attached text of the	Full name of the head of the Department developing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 1		Alla	26.06.2024
2	Introduction of changes to item A) Recommended Literature item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 2	A.V. Smolkina	Lay	26.06.2024

Form A 42 from 44

Ministry of science and high education RF
Ulyanovsk State University
Faculty of Medicine named after Biktimirov T.Z., IMEiPC
F-Educational plan of the dicipline



Appendix 1

11 "Educational, methodological and information support of the discipline"

Профессиональные базы данных, информационно-справочные системы

1. Электронно-библиотечные системы:

- 1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». Саратов, [2024]. URL: http://www.iprbookshop.ru. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.2. Образовательная платформа ЮРАЙТ: образовательный ресурс, электронная библиотека: сайт / ООО Электронное издательство «ЮРАЙТ». Москва, [2024]. URL: https://urait.ru. Режим доступа: для зарегистрир. пользователей. Текст: электронный.
- 1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента») : электронно-библиотечная система : сайт / ООО «Политехресурс». Москва, [2024]. URL: https://www.studentlibrary.ru/cgi-bin/mb4x. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.4. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО «Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг». Москва, [2024]. URL: https://www.rosmedlib.ru. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.5. Большая медицинская библиотека: электронно-библиотечная система: сайт / ООО «Букап». Томск, [2024]. URL: https://www.books-up.ru/ru/library/. Режим доступа: для зарегистрир. пользователей. Текст: электронный.
- 1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС «Лань». Санкт-Петербург, [2024]. URL: https://e.lanbook.com. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.7. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО «Знаниум». Москва, [2024]. URL: http://znanium.com . Режим доступа : для зарегистрир. пользователей. Текст : электронный.
- **2. КонсультантПлюс** [Электронный ресурс]: справочная правовая система. / ООО «Консультант Плюс» Электрон. дан. Москва : КонсультантПлюс, [2024].
- **3. eLIBRARY.R**U: научная электронная библиотека: сайт / ООО «Научная Электронная Библиотека». Москва, [2024]. URL: http://elibrary.ru. Режим доступа: для авториз. пользователей. Текст: электронный
- **4.** Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. Москва, [2024]. URL: https://нэб.рф. Режим доступа : для пользователей научной библиотеки. Текст : электронный.
- **5.** Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». URL: http://www.edu.ru. Текст : электронный.
- **6.** Электронная библиотечная система УлГУ: модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». URL: http://lib.ulsu.ru/MegaPro/Web. Режим доступа: для пользователей научной библиотеки. Текст: электронный.

Инженер ведущий

Щуренко Ю.В.

2024

Form A 43 from 44

Форма



Appendix 2

11 "Educational, methodological and information support of the discipline"

a) List of recommended literature

1 Гостищев, В. К. General surgery / The manual. - М.: GEOTAR-Media, 2019. - 220 р. - 220 с. - ISBN 978-5-9704-4984-4. - Текст: электронный // ЭБС "Консультант студента": [сайт]. - URL: https://www.studentlibrary.ru/book/ISBN9785970449844.html

2 Makarov S. V. General Surgery Issues: educational edition for students of 2 course in "Medical business" and "Pediatrics". Part 1 / S. V. Makarov, V. K. Ostrovsky, A. V. Smolkina; Ulyanovsk State University, Institute of Medicine, Ecology and Physical Culture. - Ulyanovsk: UlSU, 2018. - Текст на англ. яз.; Загл. с экрана. - Электрон. текстовые дан. (1 файл: 2,28 МБ). - Текст: электронный.

http://lib.ulsu.ru/MegaPro/Download/MObject/1411

additional

- 1 Lagoon, M. A. The Course of Faculty (Analitical) Surgery in Pictures, Tables and Schemes / M. A. Lagoon, B. S. Kharitonov, edited by professor S. V. Vertyankin Москва : ГЭОТАР-Медиа, 2017. 436 с. ISBN 978-5-9704-3927-2. Текст : электронный // ЭБС "Консультант студента" : [сайт]. URL : https://www.studentlibrary.ru/book/ISBN9785970439272.html
 2 Fractures of bones. Dislocations. First aid. Transport immobilization : electronic teaching method. allowance : Study Guide (e-course) / A. V. Smolkina, S. V. Makarov, V. K. Ostrovsky, V. P. Demin. Ulyanovsk : USU, 2018. Загл. с экрана. Электрон. текстовые дан. (1 файл : 0,62 Мб). URL: https://portal.ulsu.ru/course/view.php?id=93894. Режим доступа: Портал ЭИОС УлГУ. Текст : электронный.
- 3 . Resuscitation, reanimation, anesthesia : Study Guide (e-course) / A. V. Smolkina, S. V. Makarov, V. V. Ggoevikh [et al.]. Ulyanovsk : USU, 2019. Загл. с экрана. Электрон. текстовые дан. (1 файл : 0,42 Мб). URL: https://portal.ulsu.ru/course/view.php?id=91674. Режим доступа: Портал ЭИОС УлГУ. Текст : электронный
- 4 Beloborodov V. A. Venous disease: Tutorial / V. A. Beloborodov, V. A. Vorobev. Иркутск: ИГМУ, 2021. 84 с. Текст: электронный // ЭБС "Букап": [сайт]. URL: https://www.books-up.ru/ru/book/venous-disease-15863557/

Educational-methodical

- 1. Smolkina A. V. Methodical instraction of professor for practical training for discipline "General surgery. introduction to specialty " for specialty 05.31.01 "Medical business" / A. V. Smolkina, S. V. Makarov. Ulyanovsk : UISU, 2021. Неопубликованный ресурс; На англ. яз. URL: http://lib.ulsu.ru/MegaPro/Download/MObject/11212 . Режим доступа: ЭБС УлГУ. Текст : электронный.
 - 2. Smolkina A. V. Guidelines for independent work of students for the discipline «General surgery. introduction to specialty» for specialty 31.05.01 «Medical business» / A. V. Smolkina, S. V. Makarov. Ulyanovsk : UlSU, 2021. Неопубликованный ресурс; На англ. яз. URL: http://lib.ulsu.ru/MegaPro/Download/MObject/11209 . Режим доступа: ЭБС УлГУ. Текст : электронный.

AGREED:

Leading specialist__/ Stadolnikova D.R. / Signature / 2024

Form A 44 from 44