*Appendix to the working program*

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

**BANK OF ASSESSMENT TOOLS FOR DISCIPLINE**

**PROPAEDEUTICS AND PREVENTION OF DENTAL DISEASES**

Direction of training (specialty): 31.05.03 DENTISTRY

Department: _PROPEDEUTIC DENTISTRY__

Form of study ____FULL-TIME_____

Nizhniy Novgorod
2021

1. Fund of assessment tools for the current monitoring of academic performance, intermediate certification of students in the discipline / practice

This Fund of assessment Tools (FOS) for the discipline "Propaedeutics and prevention of dental diseases" is an integral appendix to the work program of the discipline "Name of discipline/practice". All the details of the approval submitted in the RAP for this discipline apply to this FOS.
(assessment funds allow you to evaluate the achievement of the planned results stated in the educational program.
assessment tools – a fund of control tasks, as well as a description of forms and procedures designed to determine the quality of learning by students of educational material.)

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the educational material by students in the discipline:

| № п/п | Assessment tool | Brief description of the assessment tool | Presentation of the assessment tool in the BAT |
|---|---|---|---|
| 1 | test | A system of standardized tasks that allows you to automate the procedure for measuring the level of knowledge and skills of a student | Test Task Fund |
| 2 | Case - task | A problem task in which the student is offered to comprehend a real professionally-oriented situation necessary to solve this problem. | Tasks for solving case tasks |
| 3 | Colloquium | A tool of controlling the mastering of study materials of a topic, section or sections of a discipline, organized as a class in the form of an interview between a teacher and students. | Questions on topics/sections of the discipline |
| 4 | Course work (project) | A tool of verifying the ability to present the results of theoretical, calculated, analytical, experimental studies | List of coursework topics (projects) |
| 5 | Report | The product of the student's independent work, which is a public presentation about the results obtained by solving a certain educational, practical, research or scientific topic | Topics of reports, presentations |
| 6 | Individual survey | A control tool that allows you to assess the degree of comprehension of the material | List of questions |
| 7 | Interview | A tool of control organized as a special conversation between the teacher and the student on topics related to the discipline being studied, and designed to clarify the amount of knowledge of the student on a specific section, topic, problem, etc. | Questions on topics/sections of the discipline |

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| 8 | Situational tasks | A method of control that allows you to assess the criticality of thinking and the degree of the material comprehension, the ability to apply theoretical knowledge in practice. | List of tasks |
| 10 | Round table, discussion, controversy, debate | Assessment tools that allow students to be included in the process of discussing a controversial issue, problem and evaluate their ability to argue their own point of view | List of discussion topics for a round table, discussion, polemic, debate |

**3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools**

| Code and formulation of competence * | The stage of competence formation | The stage of competence formation | Assessment tools |
|---|---|---|---|
| UC-1. He is able to carry out a critical analysis of problematic situations based on a systematic approach, to develop a strategy of actions | Input, Current Intermediate | Sections:<br>1. Examination of a dental patient. Medical documentation<br>2.. Functional anatomy of teeth<br>3. Filling of carious cavities<br>4. Tooth extraction<br>5. Endodontic dental treatment<br>6. Biomechanics of the chewing apparatus<br>7. Asepsis and antiseptics in dentistry.<br>8. Cariesogenic situation in the oral cavity<br>9. Prevention of non-carious lesions of hard tissues of teeth<br>10. Prevention of periodontal tissue diseases | *Test - 10*<br>*Case assignment -2*<br>*Colloquium -10*<br>*Control work - 7*<br>*Individual survey - 10*<br>*Interview - 1*<br>*Situational tasks - 2*<br>*Credit - 1* |
| UC-4. Able to apply modern communication technologies, including in a foreign language, for academic and professional interaction | Current Intermediate | Sections:<br>1. Biomechanics of the chewing apparatus<br>2. Epidemiology of dental diseases<br>3. Cariesogenic situation in the oral cavity<br>4. Primary prevention of dental caries<br>5. Antenatal prevention of dental diseases | *Test - 5*<br>*Colloquium - 5*<br>*Control*<br>*Job - 1*<br>*Individual survey - 5*<br>*Discussion – 1*<br>*Credit - 1* |
| GPC-1. Able to implement moral and legal norms, ethical and deontological principles in professional | Current Intermediate | Sections:<br>1. Examination of a dental patient.<br>2. Medical documentation.<br>3. Oral hygiene. Hygienic education of the population<br>4. Primary prevention of dental caries<br>5. Prevention of periodontal tissue diseases | *Test - 3*<br>*Colloquium - 3*<br>*Control*<br>*Job - 1*<br>*Individual survey - 4*<br>*Interview - 1*<br>*Situational tasks - 3* |

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|---|---|---|---|
| activity | | | *Report - 1* |
| GPC-4. Is able to carry out and monitor the effectiveness of preventive measures, the formation of a healthy lifestyle and sanitary and hygienic education of the population | Current Intermediate | Sections:<br>1. Principles of preparation of carious cavities.<br>2. Anesthesia in dentistry.<br>3. Oral hygiene. Hygienic education of the population<br>4. Primary prevention of dental caries<br>5. Medical examination of the population.<br>6. Sanitation of the oral cavity.<br>7. Prevention of dental caries complications. | *Test - 8*<br>*Case assignment - 2*<br>*Colloquium - 10*<br>*Control Work - 2*<br>*Abstract - 1*<br>*Individual survey - 7*<br>*Interview - 2*<br>*Situational tasks - 2*<br>*Report - 1*<br>*Round table - 1* |
| GPC-8. Able to use basic physico-chemical, mathematical and natural science concepts and methods in solving professional problems | Input, Current Intermediate | Sections:<br>1. Principles of preparation of carious cavities.<br>2. Filling of carious cavities<br>3. Tooth extraction.<br>4. Endodontic dental treatment<br>5. Odontopreparation.<br>6. Biomechanics of the chewing apparatus<br>7. Asepsis and antiseptics in dentistry.<br>8. Anesthesia in dentistry.<br>9. Primary prevention of dental caries<br>10. Prevention of periodontal tissue diseases | *Test - 10*<br>*Colloquium - 15*<br>*Control Work - 5*<br>*Abstract - 1*<br>*Individual survey - 15*<br>*Interview - 2*<br>*Situational tasks - 3* |
| GPC-9. Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems | Input, Current Intermediate | Sections:<br>1. Functional anatomy of teeth.<br>2. Principles of preparation of carious cavities.<br>3. Filling of carious cavities<br>4. Tooth extraction.<br>5. Endodontic dental treatment<br>6. Odontopreparation.<br>7. Biomechanics of the chewing apparatus<br>8. Anesthesia in dentistry.<br>9. Oral hygiene. Hygienic education of the population<br>10. Cariesogenic situation in the oral cavity<br>11. Primary prevention of dental caries | *Test - 10*<br>*Case assignment - 2*<br>*Colloquium - 12*<br>*Control Work - 2*<br>*Abstract - 1*<br>*Individual survey - 5*<br>*Interview - 2*<br>*Situational tasks - 3*<br>*discussion - 1,* |
| PC-2 ability and readiness to conduct preventive medical examinations, medical examination of various categories of citizens and the implementation of dispensary supervision of patients with dental pathology | Current Intermediate | Sections:<br>1. Epidemiology of dental diseases<br>2. Examination of the dental patient<br>3. Oral hygiene. Hygienic education of the population<br>4. Cariesogenic situation in the oral cavity<br>5. Primary prevention of dental caries | *Test - 5*<br>*Case assignment- 2*<br>*Colloquium - 5*<br>*Control Job - 1* |

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|---|---|---|---|
| PC-10 readiness for educational activities to eliminate risk factors for the development of dental diseases, prevention of dental diseases, to teach the population basic hygienic measures of a health-improving nature, skills of self-control of basic physiological indicators that contribute to the preservation and strengthening of health | Current Intermediate | Sections:<br>1. Oral hygiene. Hygienic education of the population<br>2. Primary prevention of dental caries<br>3. Medical examination of the population.<br>4. Sanitation of the oral cavity.<br>5. Prevention of dental caries complications.<br>6. Antenatal prevention of dental diseases<br>7. Prevention of non-carious lesions of hard tissues of teeth<br>8. Prevention of periodontal tissue diseases<br>9. Dental education | *Test - 5*<br>*Case assignment - 1*<br>*Colloquium - 9*<br>*Control Job - 1*<br>*Abstract - 2*<br>*Individual survey - 9*<br>*Interview - 2*<br>*Situational tasks - 3*<br>*Report - 1*<br>*Round table discussion - 2* |

**4. The content of the evaluation means of input, current control**

Entrance/current control is carried out by the discipline teacher when conducting classes in the form of:

**4.1 Competence assessment test - UC -1.4, GPC – 1,4,8,9, PC – 2, 10**

1. Common factors of dental caries include:
1. tartar, plaque
2. violation of the composition and properties of oral fluid
3. heredity
4. inadequate diet and drinking water
5. somatic diseases
6. shifts in the functional state of organs and systems during the formation and maturation of tooth tissues

2. Caries-static properties have:
1. fluorine
2. phosphorus
3. cadmium
4. magnesium
5. selenium

3. Specify the formula of fluorapatite:
1. Ca10(PO4)6F(OH)
2. Ca10(PO4)5F2(OH)
3. Ca8(PO4)6F2(OH)2
4. Ca8(PO4)5F2(OH)2

4. FAINTING MAY DEVELOP AT THE STAGES OF LOCAL ANESTHESIA
1) only at the beginning of anesthesia (with needle injection)
2) only at the final stage (when removing the needle)
3) before the start of anesthesia (before needle injection)
4) at any stage of local anesthesia
5) after carrying out all manipulations

5. THE MAIN RESPONSIBILITY FOR THE CLINICAL DIAGNOSIS IS BORNE BY
1) dental technician
2) dental assistant (nurse)
3) dental assistant who has received a certificate
4) dentist
5) the chief doctor of the dental clinic

6. INNERVATION OF THE CENTRAL TEETH OF THE LOWER JAW IS CARRIED OUT: {
=lower alveolar nerve
~the chin nerve
~lingual nerve
~incisive nerve
~maxillofacial nerve

7. Alginate impression materials include:
1)walls
+2)kromopan
3)carbodent
4)stomaflex
5) speedex

8. THE SAGITTAL OCCLUSAL CURVE WAS FIRST DESCRIBED BY: {
=Spee (1890)
~Gizi (1912)
~Bonneville (1895)
~Astakhov (1938)
~Camper (1775)

**4.2 Control work for competence assessment – UC -1.4, GPC – 1,4,8,9, PC – 2, 10**
1. Principles of dissection of various classes of Black
2. Impression materials
3. Biomechanics of the chewing apparatus
4. Stages of endodontic treatment
5. Composite filling materials
6. Metals in orthopedic dentistry
7. Local anesthesia in stomatology
8. Principles of disinfection in dentistry
9. Methods of local anesthesia in dentistry
10. Medicinal endogenous prevention of caries

**4.3 Colloquium for competence assessment – UC -1.4, GPC – 1,4,8,9, PC – 2, 10**
1. Stages of tooth embryogenesis
2.The structural unit of enamel
3. Adhesive systems: classification, composition, indications for use, representatives.
4. Grinding, polishing of seals from KPM light curing.
5. Errors and complications in the sealing of light-curing CPM. Methods of their prevention and elimination.
6. Compomers: composition, properties, indications and technique of application, representatives.
7. Fluid KPMS: composition, properties, indications for use, representatives. The technique of layered restoration.
8. Ormokers: composition, properties, indications and technique of application, representatives.
9. List the errors and complications in the preparation of carious cavities of class 2 Black and cavities MOD.
10. Features of the anatomical structure of the incisors of the upper and lower jaw.
11. Features of the anatomical structure of the canines of the upper and lower jaw.
12. Features of the anatomical structure of the premolars of the upper and lower jaw

13. What is "impression" and "model". Classification of "impressions" and "models".
14. Tell us the classification of impression materials?
15. Types of impression spoons, their characteristics?
16. Name the formula of natural gypsum, in what form it occurs in nature, ways to obtain it for dental practice
17. Types of local anesthesia.
18. The structure of the carpool syringe.
19. Methods of local anesthesia. Indications, contraindications.
20. Local anesthetics used in surgical dentistry.
21. Features of anesthesia in the area of anesthesia.
22. General complications of local anesthesia. Emergency care.
23. Stages of the tooth extraction operation.
24. Tools used for tooth extraction.
25. Features of removal of various groups of teeth on the upper jaw
26. The methodology of the KOSRE test.
27. The methodology of the TER test.
28. Forecasting the risk of developing a cariesogenic situation.
29. Deep fluoridation: indications, technology, course.
30. Gels for individual and professional use. Methods of application of gels, safety measures. Courses of preventive procedures.
31. Lucky. The composition of varnishes, the technique of lacquer applications, the frequency of procedures

**4.4 Situational tasks for competence assessment –GPC – 1,4,8,9, PC – 2, 10**

1. The child is 10 years old, came for a preventive examination. During the dental examination, it was revealed: OHI-S = 2.1, KPUZ= 8, chalky spots on the incisors are noticeable. Make a dental caries prevention plan for this child, include fluoride preparations in the plan.

2. A child of 8 years old, appeared for the purpose of a preventive examination.
Objectively: 11 – there is a white spot on the vestibular surface in the cervical region, probing is painless, the enamel is smooth.
Visually, a small amount of soft plaque is detected. IG = 1,3. Prescribe a scheme of remineralizing therapy.

3. The child is 12 years old at the reception. From anamnesis: was born full-term, artificial feeding from 3 months. In the first year of life, he suffered iron deficiency anemia. He suffers from colds 2-3 times a year. Suffers from insulin-dependent diabetes mellitus. Oral care has been started since the age of 3; he has been using toothpaste since the age of 6. Preventive dental measures were not carried out. When examining the oral cavity, the teeth are covered with plaque. CPU=6. Make a treatment plan, prescribe endogenous decarticular prophylaxis

4. The patient came with acute pain, indicates a tooth 3.4, during examination, the tooth cavity is opened, the pulp is bleeding, the patient with bronchial asthma, during treatment felt a deterioration in health (tired).
Make a Treatment plan
Characteristics of materials for endodontic work in this case

5. Patient M., 16 years old, went to the dentist with complaints about the appearance of dark spots on her teeth. The patient permanently lives in an area with a fluoride content in drinking water up to 3 mg/l. On examination: the enamel on all teeth has lost transparency and is covered with many yellow-brown spots. Microscopically: multiple enamel erosions, pronounced mineralization disorders in the form of hypomineralization, destruction of not only enamel, but also dentin. 1) What

pathological process of hard tooth tissues took place in this patient? 2) What is the stage of the described pathological process? 3) What are the possible outcomes of this pathological process?

**4.5 Case assignment for competence assessment –GPC – 4,9, PC – 2, 10**

1. A 48-year-old patient went to the clinic complaining of tooth pain from a hot, unpleasant odor and a change in the color of the lower fifth tooth on the left, the tooth turned gray. On examination: deep carious cavity communicating with the tooth cavity, on X-ray examination: expansion of the periodontal gap along the entire length of the root. Microscopically: in the pulp there are structureless necrotic masses with granular decay of odontoblasts, around which there are areas of granulation tissue and areas of pulp with signs of serous inflammation.1) What pathological process in the tooth pulp took place in this patient? 2) What kind of described pathological process is this? 3) What are the possible outcomes of this pathological process?

2. The student is given a detailed photoprotocol of the patient. It is necessary to describe briefly the clinical situation. Make a possible treatment plan, Prescribe hygiene items, Prescribe hygiene products in this situation. Which group, the main components. What methods of primary prevention of caries will you offer to this patient

3. A 5-year-old child together with his mother went to the dentist for a preventive examination. A small amount of soft plaque was found in the oral cavity. cpu = 0 IG = 1.1 A chalky spot with uneven edges was found in the cervical region of 53 teeth, probing is painless, the enamel is smooth, there is a lack of enamel gloss in this area. According to the mother, the child brushes his teeth twice a day - in the morning after sleep, in the evening before going to bed, with a baby toothbrush, without using paste. Make a dental caries prevention plan for this child, include exogenous prevention drugs in the plan

4. For the purpose of preventive examination, a mother with a 7-year-old child applied. On examination - 55 and 65 teeth under the seal. 36 and 46 teeth – with deep, embossed fissures, without carious lesions. Visually determined by a small amount of soft plaque on all teeth. CPU + cp = 6, IG = 2.0. Chalky spots are detected in the cervical region of 11.21 teeth, when probing the enamel is smooth.
Make a plan of preventive measures and prescribe means of endogenous prevention

**4.6 Abstract for competence assessment –GPC – 4,8,9, PC – 2, 10**
1. Choice of anesthesia method in various clinical situations,
2. Complex tooth extraction
3. Clinical comparative characteristics of modern adhesive systems of the 5th and 6th generation
4. Clinical evaluation of the antiseptic effectiveness of irrigation solutions used in endodontic treatment
5. Application of dental material Trioxident at endodontic reception
6. The choice of local anesthetic in patients with cardiac pathology
7. Modern approaches to the prevention of early childhood caries
8. "Hygiene lesson" as a method of educational work with primary school children
9. Assessment of the dental status of students of the Faculty of Dentistry
10. Aspects of dental education in preschool children

5. The content of the evaluation tools of intermediate certification

Intermediate certification is carried out in the form of an exam (4th semester) and a test (6th semester).
Tasks (evaluation tools) submitted to the exam /test for competence assessment – CC -1.4, OPC – 1,4,8,9, PC – 2, 10
1. Tests exam 6 semester – posted on the SDO portal – 450 tests

2. Tests for the 4th semester – posted on the SDO portal - https://sdo.pimunn.net/mod/quiz/edit.php?cmid=24965

## Questions for the exam on propaedeutics of dental diseases

### Therapeutic dentistry

1. Equipment and equipment of the dental therapeutic office. Scientific organization of labor. Ergonomic basics of workplace organization.
2. The device of dental installations, types of tips. Dental instruments used in therapeutic dentistry.
3. Disinfection, pre-sterilization cleaning and sterilization of dental instruments in the practice of therapeutic dentistry.
4. Embryogenesis of the tooth.
5. Enamel. Structure, chemical composition, physiology and functions of tooth enamel.
6. Dentin and tooth cement. Structure, chemical composition, physiology and functions.
7. Anatomical structure, topography of the tooth cavity and root canals of the permanent molars of the upper and lower jaw.
8. Anatomical structure, topography of the tooth cavity and root canals of permanent premolars of the upper and lower jaw.
9. Anatomical structure, topography of the tooth cavity and root canals of permanent incisors, canines of the upper and lower jaw.
10. Caries. Classification of carious cavities by Black. Principles and stages of preparation of carious cavities.
11. Preparation and filling of carious cavities of the 1st class according to Black. The choice of filling material.
12. Preparation and filling of carious cavities of the 2nd class according to Black. The choice of filling material.
13. Preparation and filling of carious cavities of class 3 Black. The choice of filling material.
14. Preparation and filling of carious cavities of class 4 by Black. The choice of filling material.
15. Preparation and filling of carious cavities of class 5 Black. The choice of filling material.
16. Dental filling materials for insulating gaskets. Composition, properties, indications for use. Rules for laying pads.
17. Dental filling materials for medical pads. Classification, composition, properties, indications for use.
18. Cements in the practice of therapeutic dentistry. Classification, composition, properties, indications for use. The method of preparation, the features of filling.
19. Glass ionomer cements. Composition. Features. Indications and contraindications for use.
20. Composite filling materials of chemical curing. Composition, properties, indications for use. Methods and stages of work with composite filling materials of chemical curing.
21. Composite filling materials of light curing. Composition, properties, indications for use. Methodology and stages of work.
22. Microhybrid composite filling materials. Composition, properties, indications for use. Methodology and stages of work.
23. Primer-adhesive systems. Composition, properties, indications for use, technique of application into the carious cavity.
24. Amalgams. Composition, properties, method of preparation, features of filling. Advantages and disadvantages of amalgam.
25. Contact point. Types of contact point, methods of formation when filling incisors, premolars and molars with various filling materials.
26. Errors and complications in filling carious cavities using composite materials. Polymerization stress. Ways to eliminate it.
27. Stages and tasks of endodontic treatment of root canals. Tools.
28. Opening of the tooth cavity. Goals and objectives. Features of carrying out in different groups of teeth. Tools.
29. Endodontic tools. Classification according to ISO. The method of application. The order of use.

30. The working length of the tooth. Methods for determining the working length of the tooth. Physiological, anatomical and radiological apical openings.
31. Vital methods of pulpitis treatment. Indications, contraindications. Stages of the event.
32. Devital methods of pulpitis treatment. Indications, contraindications. Stages of carrying out.
33. Mechanical treatment of the root canal. Goals and objectives. The technique of Step – Back.
34. Mechanical treatment of the root canal. Goals and objectives. Techniques: Crown - Down, Balanced force.
35. Medical treatment of the root canal. Characteristics of drugs, their properties. Methods of drug treatment.
36. Temporary filling of root canals. Indications for conducting. Materials used. Stages of work.
37. Dental materials for permanent root fillings. Classification, composition, properties and requirements for them.
38. Permanent filling of root canals. Methods, assessment of sealing quality.
39. Guttapepcha. Composition and properties. Methods of filling root canals with gutta-percha pins. Choosing a siler.
40. Errors and complications arising during endodontic work. Methods of their prevention and elimination.

**Surgical dentistry**

41. Requirements for the organization of a surgical office. Measures to maintain asepsis at an outpatient surgical appointment.
42. Pre-sterilization treatment, disinfection and sterilization of surgical instruments. Control of sanitary and epidemiological measures.
43. Examination of the patient in the surgical office. Deontology and medical ethics.
44. Clinical and pharmacological characteristics of local anesthetics used in dentistry. The mechanism of action of local anesthetics.
45. Local anesthetics of the ester group. Mechanism of action, representatives.
46. Local anesthetics of the amide group. The main representatives. Features of the mechanism of action. Lidocaine (properties, indications for use, maximum permissible doses).
47. Local anesthetics of the amide group. Mechanism of action. Mepivacaine (properties, indications for use).
48. Local anesthetics of the amide group. The main representatives. Features of the mechanism of action. Articaine (properties, modern representatives, indications for use).
49. Classification of methods of local anesthesia. Indications and contraindications for local anesthesia during surgical interventions. Advantages and disadvantages of local anesthesia.
50. Infiltration anesthesia. Indications and contraindications. Technique and features of carrying out on the upper and lower jaw.
51. Periodontal methods of local anesthesia. Indications and contraindications. Technique of intraligmental, intraceptal, intraosseous anesthesia.
52. Vasoconstrictors. Mechanism of action. Indications and contraindications for use during local anesthesia.
53. Premedication. Conducting premedication during dental interventions at an outpatient polyclinic reception. Indications for use. The drugs used.
54. Carpool technologies. The composition of the carpula. Characteristics of the main components.
55. Innervation of teeth and jaws. Topography of the trigeminal nerve.
56. Topographic anatomy of the maxillary nerve. Features of anesthesia on the upper jaw.
57. Anesthesia at the hillock of the upper jaw. Pain relief zone. Technique of conducting. Complications, their prevention. Tuberal anesthesia according to Egorov. Complications and prevention.
58. Infraorbital anesthesia. Pain relief zone. Technique of execution. Complications and prevention.
59. Anesthesia at the large palatine opening. Technique of conducting. Pain relief zone. Complications and prevention.
60. The technique of analgesia of the nasolabial nerve. Pain relief zone. Complications and prevention

61. Topographic anatomy of the motor branches of the trigeminal nerve. Switching off the motor branches of the trigeminal nerve by Berche. Pain relief zone. Technique of execution. Complications and prevention.
62. Mental anesthesia. The methodology of conducting. Pain relief zone. Complications and prevention.
63. Topographic anatomy of the mandibular nerve. The choice of the method of anesthesia on the lower jaw.
64. Mandibular anesthesia (intraoral methods). Indications, technique of execution, analgesia zone.
65. Mandibular anesthesia (extra-oral methods). Indications, technique of execution, analgesia zone.
66. The technique of switching off the buccal and lingual nerves. Topography of the buccal and lingual nerves. Technique of conducting. Pain relief zone.
67. Thorusal anesthesia according to Weisbrem. Technique of execution. Pain relief zone.
68. Anesthesia with difficulty opening the mouth. Anesthesia according to Vazirani-Akinozi, Lagardi, Egorov-Lapis. Technique of conducting.
69. Tooth extraction operation. Indications, contraindications. Stages of tooth extraction.
70. Tools for tooth extraction. The device of forceps and elevators. The technique of tooth extraction with forceps and elevators. Principles of selection of forceps.
71. Features of the removal of different groups of teeth with a preserved crown on the upper jaw. The choice of tools. Complications.
72. Features of tooth root removal on the upper jaw. The choice of tools. Complications.
73. Features of the removal of different groups of teeth with a preserved crown on the lower jaw. The choice of tools. Complications.
74. Features of removing the roots of teeth on the lower jaw. The choice of tools. Complications.
75. Features of the removal of "wisdom" teeth on the lower jaw. The choice of tools, the method of execution.
76. Complex removal of teeth and roots. Tools. Technique of execution. Complications. Prevention.
77. Local complications during tooth extraction. Causes, prevention.
78. Local complications after tooth extraction. Reasons. Tactics of a dental surgeon and prevention of complications.
79. Perforation of the maxillary sinus. Reasons. Tactics of the doctor when the root penetrates into the maxillary sinus.
80. Features of surgical interventions in the maxillofacial region.

**Orthopedic dentistry**

1. Organization of the orthopedic office. Basic and auxiliary equipment, tools and materials used in the clinic.
2. Examination of the patient in the clinic of orthopedic dentistry. Basic and additional methods.
3. Structure and functions of the temporomandibular joint.
4. Chewing muscles. Absolute strength of the masticatory muscles.
5. Types of physiological bites.
6. Types of pathological bites.
7. Biomechanics of the lower jaw.
8. Biomechanics of the chewing apparatus.
9. Definition of "impression" and "model". Classification of prints and models.
10. The concept of occlusion and articulation. Occludators and articulators.
11. Polyester impression materials. Composition, properties, indications for use.
12. Methods and means for disinfection of impressions and prostheses.

13. Modeling materials (waxes, wax compositions). Wax for the bases of removable dentures.
14. Crystallizing materials for prints and models.
15. Plaster. Types, properties, methods of mixing.
16. Double impressions. Indications for use. One- and two-phase production technique.
17. Silicone impression materials. Composition, properties, indications for use.
18. Alginate impression materials. Composition, properties. Indications for use.
19. Thermoplastic impression materials. Composition, properties, indications for use.
20. Zinc oxide-ethylene impression materials. Composition, properties, indications for use.
21. Plastics of cold polymerization. Types, composition, properties, indications for use. Advantages and disadvantages. Polymerization mechanism.
22. Technology of plastic dough. Causes of porosity and internal stresses. Methods of their prevention.
23. Polymer materials in the practice of orthopedic dentistry.
24. Basic acrylic plastics of hot polymerization (ethacryl, fluorax). Composition, properties.
25. Elastic base lining materials (acrylic, silicone). Composition, properties, method of application.
26. Alloys of low-melting metals. Composition, properties, application.
27. Types of solders. Composition, physical and chemical properties.
28. Alloys based on silver and palladium.
29. Gold alloys of 900 and 750 samples used in orthopedic dentistry. Refining. Determination of the gold sample
30. Chromium-nickel and chromium-cobalt alloys used in orthopedic dentistry.
31. Titanium alloys used in orthopedic dentistry.
32. Materials for chemical processing of alloys (bleaches, fluxes). Composition, properties.
33. Phosphate molding materials for casting dental alloys.
34. Silicate molding materials for casting dental alloys.
35. Molding materials based on gypsum for casting dental alloys.
36. Technology of refractory models.
37. Masses for the manufacture of refractory models.
38. Indications for the choice of cement for fixing fixed prostheses. Types of cements.
39. Materials for temporary fixation of fixed prostheses.
40. Dental porcelain. Composition, properties, application

**Questions for the test**

1. Cariesogenic situation in the oral cavity. The concept of a cariesogenic situation and cariesogenic factors.
2. Dental deposits, classification. Composition, structure, mechanism of formation, properties, detection, function in relation to enamel.
3. Prevention of periodontal diseases in various age periods of life. State, medical and individual preventive measures. Periodontal disease prevention program.
4. Primary prevention of dental caries. The meaning, mechanism of action and methods of systemic administration of fluorides. Security control.
5. Communal dental caries prevention programs. The choice of strategies. Organization of programs. The importance of systemic and local fluoridation.
6. Dental medical examination, purpose, stages of implementation, formation of groups, content, evaluation of effectiveness.
7. Methods of dental status research: study of the face, regional lymph nodes, respiratory function, swallowing, speech, chewing, temporomandibular joint, salivary glands. Signs of a physiological and pathological condition.
8. Epidemiology of dental diseases. Indicators of dental health of the population: the prevalence and intensity of diseases, the increase and degree of activity of caries, indices "kp", "KPU", PMA, CPI, and others. Methods of calculating indicators, their assessment, value for dentistry.
9. Cariesogenic situation in the oral cavity. The mechanism of action of the factor "diseases and functional disorders of the organs and systems of the body" on the development of dental caries in different age periods

10. Comprehensive system of prevention of dental diseases. Preparatory and organizational measures during the implementation of communal programs. The importance of epidemiological studies.
11. Prevention of periodontal diseases. Methods and means of prevention, the importance of individual and professional oral hygiene.
12. Professional oral hygiene. Importance in the prevention of dental diseases. A set of measures for professional oral hygiene, personnel and material support.
13. Features of oral care of patients with dental anomalies undergoing orthodontic treatment, having dentures, in the postoperative period, etc.
14. Endogenous drug-free prevention of caries. The importance of nutritional disorders (composition, consistency, presence of preservatives, stickiness, easily digestible carbohydrates, frequency of intake, etc.) in the development of a cariesogenic situation in the oral cavity.
15. Caries resistance of tooth enamel. The influence of the chemical composition, structure of enamel, genetic code on the caries resistance of enamel.
16. Caries resistance of tooth enamel. Direct and indirect methods of assessing enamel caries resistance.
17. Identification of dental deposits: methods, assessment using the hygienic indices of Fedorov-Volodkina, Green-Vermillion. The use of indices in dentistry.
18. Methods of examination of hard tooth tissues (examination, probing, drying, vital staining, transilluminative, luminescent, radiographic, etc.). Record of the international dental formula.
19. Examination of periodontal tissues: visual, palpatory, instrumental. Additional research methods. Indices registering the state of periodontal disease (PMA, CPI, etc.).
20. Study of the state of the oral mucosa, vestibule, frenulum of the lips and tongue, mucosal cords, signs of physiological and pathological condition. The role of disorders of the structure of the soft tissues of the oral cavity in the development of dental diseases.
21. Hygienic education and training of the population in dentistry. Performers and content of work in preschool institutions. Methods of conducting a health lesson in kindergarten.
22. Health education in dentistry: purpose, objects, types, means, forms, principles, methods of implementation. Importance in the prevention of dental diseases.
23. Items of individual oral hygiene. Toothpicks, floss, interdental stimulators, oral irrigators. Their varieties, structure, properties, indications and methods of application. Flossing technique.
24. Therapeutic and prophylactic toothpastes. Classifications. Composition, properties, indications and methods of application of anti-carious and anti-inflammatory toothpastes.
25. Individual oral hygiene, its importance in the prevention of dental diseases. Items of individual oral hygiene. Toothbrushes (regular, special, electric): structure, properties, indications for use. Care of the brush.
26. The concept of the norm, variants of the norm, anomalies and deformations of the dental apparatus in children during the period of lactic bite.
27. Composition and properties of oral fluid, its role in the processes of enamel maturation, demineralization and remineralization. The value of viscosity, PH, buffer capacity, ability to crystallize, etc. for the development of a cariesogenic situation of the oral cavity.
28. Fluoridation of drinking water. The history of the method application, indications for carrying out, fluoride dosage, effectiveness.
29. Dental plaque: identification, localization, composition, structure, mechanism of formation. Microorganisms of dental plaque in the development of caries and periodontal diseases.
30. Prediction of dental caries in children and adults, population. Criteria for individual forecasting.
31. Oral hygiene products. Classification of toothpastes. Composition, properties, indications for the use of hygienic toothpastes.
32. Prevention of fissure caries. Composition, properties, mechanism of action, methods of application of materials for sealing and sealing natural recesses of teeth. Indications, technique of procedures, personnel, effectiveness of sealing of dental fissures.
33. Supra-gingival and subgingival tartar. Frequency and mechanism of formation, localization, detection, composition, properties, role in the development of periodontal diseases.

34. Endogenous drug prevention. Karyoprophylactic drugs: composition, properties, mechanism of action, indications and contraindications, methods of application. The meaning and mechanism of action of fluorides.
35. The importance of health education of future parents in the prevention of dental anomalies in children. The role of normalization of the functions of closing the lips, swallowing and chewing in the prevention of dental anomalies in children.
36. Controlled teeth cleaning: methods of carrying out, evaluation of the technique and quality of teeth cleaning. Application in dentistry.
37. The concept of the norm, variants of the norm, anomalies and deformations of the dental apparatus in children during periods of replaceable and permanent bite.
38. Instrumental and ultrasonic methods of tartar removal. Conditions and technique of execution, advantages and disadvantages of methods.
39. Local cariesogenic factors. Significance in the development of a cariesogenic situation.
40. Fluoridation of milk and salt. Indications for use, fluoride dosage, personnel, cost of programs, efficiency, safety control.
41. Cariesogenic situation in the oral cavity. Cariesogenic factors. The mechanism of action in different age periods.
42. Approaches, methods and means of prevention of dental caries in different age periods of a child's life. Antenatal and postnatal prophylaxis.
43. Prevention of dental caries. The concept of primary caries prevention, basic and auxiliary (special) measures. Performance evaluation.
44. Methods of detecting cariesogenic factors, assessment of the cariesogenic situation in the oral cavity.
45. Planned preventive sanitation of the oral cavity: purpose, objectives, organizational forms and methods of implementation, quantitative and qualitative assessment of its effectiveness.
46. Bad habits in children as an etiological factor of dental anomalies and deformities. Methods of their identification and methods of elimination. The importance of timely sanitation of the oral cavity, pharynx, nasopharynx in the prevention of dental anomalies.
47. Caries resistance of tooth enamel. Periods of formation and changes of caries resistance, factors influencing these processes.
48. Exogenous drug prevention. Means of prevention of dental caries. Advantages and disadvantages of topical application of fluorides, comparative characteristics of organic and inorganic fluorides.
49. Liquid oral hygiene products. Elixirs, rinses: composition, properties, classifications, indications and methods of application.
50. Local immunity of the oral cavity. The role of local immunity in the occurrence of caries and periodontal diseases.

**5.1** The list of control tasks and other materials necessary for the assessment of knowledge, skills, skills and experience of activity
**5.1.1** Exam questions on the discipline of Propaedeutics and prevention of dental diseases (4th semester):

| Question | Competence code |
|---|---|
| 1 Section of therapeutic dentistry | UC -1.4, GPC – 4.8.9 |
| 2 Section of orthopedic dentistry | UC -1.4, GPC – 4.8.9 |
| 3. Section of surgical dentistry | UC -1.4, GPC – 1,4,8,9 |

**5.1.2** Questions for the test in the discipline of Propaedeutics and prevention of dental diseases (6th semester):

| Question | Competence code |
|---|---|
| **№1- 50** | UC -1,4, PC – 2, 10 |

**6. Criteria for evaluating learning outcomes**

*For the credit*

| Learning outcomes | **Evaluation criteria** | |
|---|---|---|
| | Not counted | Credited |
| Completeness of knowledge | The level of knowledge is below the minimum requirements. There were gross mistakes. | The level of knowledge in the volume corresponding to the training program. Minor mistakes may be made |
| Availability of skills | Basic skills are not demonstrated when solving standard tasks. There were gross mistakes. | The basic skills are demonstrated. Typical tasks have been solved, all tasks have been completed. Minor mistakes may be made. |
| Availability of skills (possession of experience) | Basic skills are not demonstrated when solving standard tasks. There were gross mistakes. | Basic skills in solving standard tasks are demonstrated. Minor mistakes may be made. |
| Motivation (personal attitude) | Educational activity and motivation are poorly expressed, there is no willingness to solve the tasks qualitatively | Educational activity and motivation are manifested, readiness to perform assigned tasks is demonstrated. |
| Characteristics of competence formation* | The competence is not fully formed. The available knowledge, skills, and skills are not enough to solve practical (professional) tasks. Repeated training is required | The formation of competence meets the requirements. The available knowledge, skills, skills and motivation are generally sufficient to solve practical (professional) tasks. |
| The level of competence formation* | Low | Medium/High |

*For the exam*

| Learning outcomes | **Оценки сформированности компетенций** | | | |
|---|---|---|---|---|
| | unsatisfactory | satisfactory | well | **excellent** |
| Completeness of knowledge | The level of knowledge is below the minimum | The minimum acceptable level of knowledge. A lot of rough | The level of knowledge in the volume corresponding | The level of knowledge in the volume corresponding to the training program, without errors |

| Learning outcomes | **Оценки сформированности компетенций** | | | |
|---|---|---|---|---|
| | unsatisfactory | satisfactory | well | **excellent** |
| | requirements. There were gross mistakes | mistakes were made | to the training program. Several blunders have been made | |
| Availability of skills | Basic skills are not demonstrated when solving standard tasks. There were gross mistakes | The basic skills are demonstrated. Typical problems with non-rough errors have been solved. All tasks have been completed, but not in full. | All basic skills are demonstrated. All the main tasks with non-rough errors have been solved. All tasks have been completed, in full, but some with shortcomings | All the basic skills have been demonstrated, all the main tasks have been solved with some minor shortcomings, all the tasks have been completed in full |
| Availability of skills | Basic skills are not demonstrated when solving standard tasks. There were gross mistakes | There is a minimal set of skills for solving standard tasks with some shortcomings | Basic skills in solving standard tasks with some shortcomings are demonstrated | Demonstrated skills in solving non-standard tasks without errors and shortcomings |
| (possession of experience) | The competence is not fully formed. The available knowledge, skills, and skills are not enough to solve professional tasks. Repeated training is required | The formation of competence meets the minimum requirements. The available knowledge, skills, and abilities are generally sufficient to solve professional tasks, but additional practice is required for most | The formation of competence generally meets the requirements, but there are shortcomings. The available knowledge, skills, skills and motivation are generally sufficient to solve professional | The formation of competence fully meets the requirements. The available knowledge, skills, skills and motivation are fully sufficient to solve complex professional tasks |

| Learning outcomes | **Оценки сформированности компетенций** | | | |
|---|---|---|---|---|
| | unsatisfactory | satisfactory | well | **excellent** |
| | | practical tasks | tasks, but additional practice is required for some professional tasks | |
| Characteristic of competence formation* | Low | Below average | Intermediate | High |

*For testing:*

*Mark "5" (Excellent) - points (100-90%)*
*Mark"4" (Good) - points (89-80%)*
*Mark "3" (Satisfactory) - points (79-70%)*

*Less than 70% – Unsatisfactory – Mark "2"*

*Developer(s):*
*A.V. Kochubeynik*