

**Assessment tools for certification  
in the discipline "Prosthetic Dentistry"  
for students of the educational program  
specialist in the specialty 31.05.03 Dentistry,  
direction (profile) Dentistry,  
form of study intramural  
for the 2023-2024 academic year**

1.1. Evaluation tools for conducting current certification in the discipline

The current assessment includes the following types of tasks: testing, solving situational problems, evaluating the development of practical skills), writing and defending an abstract, and interviewing control questions.

1.1.1. Examples of test tasks

Verifiable indicators of competence achievement: OPK-6.1.3; OPK-12.1.3; OPK-13.1.2;

1. Tabs are used for

- a) restoration of the tooth crown defect;
- b) filling the defect of the dentition;
- c) fixation of the cantilever prosthesis;
- d) supports of bridge prostheses;
- e) prevention of further pathology of tooth erasure

2. The easyshade appart "isdesigned to detect:

- a) the size of the teeth;
- b) the shape of the teeth;
- c) the color of the teeth.

3. A person's profile can be:

- a) direct;
- b) flat;
- c) round.

4. Veneers can be:

- a) composite or ceramic materials;
- b) ceramic, metal;
- c) cermet materials.

5. The functioning link in the partial absence of teeth is

- a) a group of teeth with increased activity;
- b) a group of teeth devoid of antagonists;
- c) teeth in the lateral parts of the dentition rows;
- d) teeth in the anterior part of the dentition.

6. Duplicate the working model using

- a) alginate material;
- b) hydrocolloid material;
- c) thermoplastic material;
- d) eugenoloxyszink material;
- e) silicone material.

7. Parallelometry is

- a) a method for finding the necessary inclination of the model (relative to the vertical of the device) in order to select the optimal route of insertion and removal of the clasp prosthesis frame, as well as ensuring its fixation;
- b) methodology for determining the locations of support elements;
- c) methodology for determining the location of the common;
- d) the clinical equator from the point of view of aesthetics.

8. Common etiological factors of periodontitis include

- a) cardiovascular diseases;

- b) systemic osteopathy;
- c) diseases of the nervous system;
- d) true 1), 2) and 3);
- e) 1) and 2) are true.

9. In case of periodontal diseases, an X-ray examination is performed by the method of

- a) contact intraoral;
- b) an orthopantomogram;
- c) panoramic upper and lower jaws;
- d) sideways.

10. The nature of bone resorption of alveolar processes in periodontal disease

- a) uniform
- b) uniform and horizontal;
- c) uneven;
- d) uneven, horizontal and vertical.

### 1.1.2. Example (s) of situational problem (s)

Verifiable indicators of competence achievement: CC-1.2.1; OPK-2.2.4; OPK-2.3.1; OPK-2.3.2; OPK-2.3.3; OPK-5.2.1; OPK-5.2.2; OPK-5.2.3; OPK-5.2.4; OPK-6.2.1.; OPK-6.2.2; OPK-6.2.3; OPK-8.3.1; OPK -9.2.1; OPK -9.3.1; OPK-12.2.1; OPK-12.2.2; OPK-12.2.3

Full name: I-va. Paul. g Age 39 My job Engineer

	N=11.5 7,3					N=7.5 7,5					N=11.5 To 11.5						
More Than 3/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N=30,5 26,3
3/4	0.5	0.75	0.75	0.45	0.45	0.4	0.25	0.3	0.3	0.25	0.4	0.45	0.45	0.75	0.75	0.5	
1/2	1.0	1.5	1.5	0.9	0.9	0.75	0.5	0.6	0.6	0.5	0.75	0.9	0.9	1.5	1.5	1.0	
1/4	1.5	2.25	2.25	1.3	1.3	1.1	0.75	0.9	0.9	0.75	1.1	1.3	1.3	2.25	2.25	1.5	
N	2.0	3.0	3.0	1.75	1.75	1.5	1.0	A	A	1.0	1.5	1.75	1.75	3.0	3.0	2.0	
Mobility of Odontogram																	
	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	
Odontogram														P			N=30,0 30
Mobility																	
N	2.0	3.0	3.0	1.75	1.75	1.5	1.0	1.0	1.0	1.0	1.5	1.75	1.75	3.0	3.0	2.0	
1/4	1.5	2.25	2.25	1.3	1.3	1.1	0.75	0.75	0.75	0.75	1.1	1.3	1.3	2.25	2.25	1.5	
1/2	1.0	1.5	1.5	0.9	0.9	0.75	0.5	0.5	0.5	0.5	0.75	0.9	0.9	1.5	1.5	1.0	
3/4	0.5	0.75	0.75	0.45	0.45	0.4	0.25	0.25	0.25	0.25	0.4	0.45	0.45	0.75	0.75	0.5	
More Than 3/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	N=11.5 To 11.5					N=7.0 7,0					N=11.5 11,5						

Occlusion: The ratio of dentition and jaws according to the type of orthognathic bite.  
 Additional data: 17.36 teeth - extensive fillings, the marginal fit of the fillings is good.  
 IOPZ= 0.8.

Task: Make a diagnosis. Make a treatment plan. Your tactic for 17.36 teeth.

### 1.1.3. Examples of practical skills assessment tasks

Verifiable indicators of competence achievement: CC-1.2.3; PC-1.1.1. PC-1.1.2. PC-1.1.3. PC-1.1.4. PC-1.2.1. PC-1.2.2. PC-2.1.1. PC-2.1.2. PC-2.1.3. PC-2.2.1. PC-2.2.2. PC-2.2.3. PC-2.3.1. PC-2.3.2. PC-2.3.3. PC-3.2.1. PC-3.2.2. PC-3.2.3; PC-4.2.1. PC-4.2.2. PC-4.2.3. PC-4.3.1. PC-4.3.2. PC-4.3.3. PC-6.1.1.; PC-6.1.2. PC-6.1.3. PC-6.2.1. PC-6.2.2; PC-7.1.1. PC-7.1.2. PC-7.1.3. PC-7.2.1.; PC-7.2.2. PC-7.2.3. PC-8.1.1. PC-8.1.2. PC-8.1.3. PC-8.2.1. PC-8.2.2. PC-8.2.3.

1. Preparation of the tooth under the tab
2. Preparation of the tooth for a metal-ceramic crown.
3. Getting an updated printout

#### 1.1.4. Examples of abstract topics

Verifiable indicators of competence achievement: OPK-6.1.3; OPK-12.1.3; OPK-13.1.2.

1. Application of digital technologies for the manufacture of artificial crowns.
2. Causes of breakdowns and alterations of various prosthetic structures.
3. Issues of asepsis and antiseptics in the orthopedic department in the modern aspect.

#### 1.2. Evaluation tools for conducting intermediate certification in the discipline

Intermediate certification is conducted in the form of an exam.

Intermediate certification includes the following types of tasks: testing, solving a situational problem, evaluating the development of practical skills (abilities), and an interview.

##### 1.2.1. Examples of test tasks

Verifiable indicators of competence achievement: OPK-6.1.3; OPK-12.1.3; OPK-13.1.2.

##### 1. Possible errors and complications when using cast pin tabs

- a) perforation of the root walls;
- b) split root;
- c) localized increased erasability;
- d) cementing the tab.

##### 2. According to materials, veneers are distinguished:

- a) wax;
- b) metal;
- c) ceramic ones.

##### 3. According to the tab function, there are:

- a) restoration;
- b) supporting and unloading devices;
- c) protective measures.

##### 4. In the treatment of partial absence of teeth, chewing efficiency is better restored

- a) removable plate prostheses;
- b) clasp prostheses;
- c) bridge prostheses.

##### 5. Supply of supporting crowns is a clinical step in the manufacture of a bridge prosthesis

- a) soldered;
- b) solid cast;
- c) any person;
- d) metal-ceramic;
- e) metal-plastic material.

##### 6. Optimal step for preparing cermet crowns

- a) 100°;
- b) 135°;
- c) 6°;
- d) 45°.

##### 7. When manufacturing a metal-ceramic crown, the working impression is removed

- a) silicone material;
- b) gypsum;
- c) alginate material;
- d) polyester material.

##### 8. When replacing the wax base of a removable prosthesis with a plastic one, there are the following ways гипсовкито plaster models in a cuvette:

- a) direct;

- b) cross-over;
- c) reverse;
- d) duplicated;
- e) combined.

9. The stage of correction of the basis of a removable plate prosthesis includes

- a) visual control, clarification of traumatic areas, determination of areas of increased компрессимucosal compression under the base of the prosthesis using impression masses;
- b) removal of traumatic areas on the base of the prosthesis by relocation;
- c) selective пришлифовываниegrinding of the denture teeth.

10. Structural elements of clasp prostheses

- a) arch, clamp system, base with artificial teeth;
- b) arc, fixation system, base (saddle part) with artificial teeth.+
- c) fixing system, connecting elements (arches, plates), saddle base.

### 1.2.2. Example of a situational problem

Verifiable indicators of competence achievement: CC-1.2.1; OPK-2.2.4; OPK-2.3.1; OPK-2.3.2; OPK-2.3.3; OPK-5.2.1; OPK-5.2.2; OPK-5.2.3; OPK-5.2.4; OPK-6.2.1.; OPK-6.2.2; OPK-6.2.3; OPK-8.3.1; OPK -9.2.1; OPK -9.3.1; OPK-12.2.1; OPK-12.2.2; OPK-12.2.3

Task 1.

Full name: M-s.      Gender: m Age: 19 Profession: Student

	N=11.5					N=7.5 5,0					N=11.5 To 11.5					N=30,5 28	
More Than 3/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3/4	0.5	0.75	0.75	0.45	0.45	0.4	0.25	0.3	0.3	0.25	0.4	0.45	0.45	0.75	0.75		0.5
1/2	1.0	1.5	1.5	0.9	0.9	0.75	0.5	0.6	0.6	0.5	0.75	0.9	0.9	1.5	1.5		1.0
1/4	1.5	2.25	2.25	1.3	1.3	1.1	0.75	0.9	0.9	0.75	1.1	1.3	1.3	2.25	2.25		1.5
N	2.0	3.0	3.0	1.75	1.75	1.5	1.0	A	A	1.0	1.5	1.75	1.75	3.0	3.0		2.0
Mobility of Odontogram																	
	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7		8
Odontograms																	
Mobility																	
N	2.0	3.0	3.0	1.75	1.75	1.5	1.0	1.0	1.0	1.0	1.5	1.75	1.75	3.0	3.0		2.0
1/4	1.5	2.25	2.25	1.3	1.3	1.1	0.75	0.75	0.75	0.75	1.1	1.3	1.3	2.25	2.25		1.5
1/2	1.0	1.5	1.5	0.9	0.9	0.75	0.5	0.5	0.5	0.5	0.75	0.9	0.9	1.5	1.5		1.0
3/4	0.5	0.75	0.75	0.45	0.45	0.4	0.25	0.25	0.25	0.25	0.4	0.45	0.45	0.75	0.75		0.5
More Than 3/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	N=11.5 To 9.5					N=7.0					N=11.5						9,5

Bite: orthognathic.

Additional information: The patient plans to replace the defect in the anterior region with implants.

Task: Make a diagnosis. Make a treatment plan. What methods do you know for correct implant placement at the planning stage? Describe clinical and laboratory methods of manufacturing structures on implants.

### 1.2.3. List of interview questions

<b>#</b>	<b>Questions for intermediate certification</b>	<b>Verifiable indicators of achievement of competencies</b>

1.	Orthopedic dentistry. Goals and objectives. Fundamental principles in orthopedic dentistry. The main stages of development of orthopedic dentistry. The role of Russian scientists in the development of modern orthopedic dentistry (V. Y. Kurlyandsky, E. I. Gavrilov, V. Y. Milikevich).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
2.	Sanitary and hygienic standards of the doctor's office and dental laboratory. Disinfection system, sterilization in the clinic and laboratory. Safety practices in the clinic and laboratory.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
3.	Absolute strength of the masticatory muscles. Definition of "chewing force", "chewing pressure", "chewing efficiency". Methods for determining chewing efficiency.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
4.	MMethods of recording the movements of the lower jaw and the functional state of muscles.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
5.	Methods of examination of patients with defects in hard tissues of teeth and dentition in the clinic of orthopedic dentistry. Methods for determining the functional state of the dentoalveolar system (clinical, functional (laboratory) and static)).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
6.	Preparation of the oral cavity for orthopedic treatment. General, special and psychological training of patients.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
7.	Organization of work of orthopedic dentistry clinic. Documentation of the orthopedic dentistry clinic. Medical history (outpatient card of a dental patient form 043. U). Medical registration and reporting documentation of an orthopedic dentist: forms No. 37, No. 39, No. 43-U, order-order, informed consent).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
8.	Classification of impressions and impression materials. Characteristics of impression materials. Methods for getting impressions.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
9.	The concept of articulation, central occlusion and the central ratio of dentition and jaws. Methods for determining central occlusion and central ratio in various clinical variants of dentition defects. Devices that reproduce the movements of the lower jaw.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
10.	Defects of dental crowns. Classification of carious cavities byBlack. International Classification of Diseases (ICD-10, ICD-10). Index of destruction of the occlusal surface of the tooth - IROPZ.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
11.	Types of dentures that restore the anatomical shape of teeth. Inlays, veneers, artificial crowns, pin-stump structures - their types, indications for use.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
12.	Rules of preparation of hard tissues of teeth. Types and justification of the choice of grinding tools. Methods of anesthesia during preparation.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
13.	Orthopedic treatment of dental hard tissue pathology using inlays. Types of tabs. Basic principles of forming cavities under tabs. Clinical and laboratory stages of prosthetics of defects of hard tissues of teeth with metal inserts.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
14.	Aesthetic aspects in orthopedic dentistry. Basic aesthetic parameters. Regularities in the structure of the body, face, and dental system of patients. Significance in the design of orthopedic structures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
15.	Modern methods of orthopedic treatment of patients with hematology hard tissues of teeth with the use of ceramic and composite inlays.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

16.	Application of veneers. Features of preparation, obtaining impressions, and fixation. Modern manufacturing technologies. Protocol of adhesive fixation of veneers.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
17.	CAD/CAM tab manufacturing technology. Principles of subsequent cladding of the frame. Materials.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
18.	Modern computer technologies for manufacturing fixed and removable dentures. The concept of CAD / CAM systems. Characteristics of the main structural materials.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
19.	Zirconium oxide, aluminum oxide. Scope of application. Advantages and disadvantages compared to other structural materials.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
20.	Determination of the color of natural and artificial teeth. Computer technologies for determining the color of teeth, visual assessment methods.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
21.	Prosthetics of defects in hard tooth tissues with artificial crowns. Their classification. Indications and contraindications for prosthetics with artificial crowns.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
22.	Preparation of hard tooth tissues. Features of preparation for metal, plastic and combined crowns. Complications of dental preparation, preventive measures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
23.	Methods of opening the gingival sulcus. Mechanical, surgical, and combined techniques. Materials. The order of execution.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
24.	Classification of impressions. Classification of impression materials. Content names. Methods of obtaining impressions and criteria for their evaluation. Complications in obtaining impressions and preventive measures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
25.	Clinical and laboratory stages of prosthetics of patients with stamped metal crowns. Metal alloys used for their manufacture.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
26.	Requirements for complete artificial crowns. Requirements for complete artificial crowns (stamped, plastic, solid cast, cermet) that are properly stored on the support tooth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
27.	Methods for determining and fixing central occlusion. Determination of central occlusion of the jaws in various defects of the dentition.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
28.	Possible errors and complications at various stages of artificial crown replacement. Ways to eliminate them.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
29.	Plastic crowns. Indications for use. Clinical and laboratory stages of their production. Materials used for making plastic crowns.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
30.	Solid-cast metal crowns and solid-cast crowns with facing (cermet, metal-plastic). Features of dental preparation. Clinical and laboratory stages of manufacturing. Construction materials. Precision casting techniques for metal alloys. Metal alloys.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
31.	Porcelain crowns. Methods of making porcelain crowns. Clinical and laboratory stages of manufacturing. Porcelain products, their characteristics.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

32.	Clinical and laboratory stages of orthopedic treatment with metal-ceramic crowns. Materials.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
33.	Telescopic crowns. Indications for use. Clinical and laboratory stages of manufacturing orthopedic structures with a telescopic fixation system.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
34.	Purpose and methods of manufacturing temporary crowns. Materials for making temporary crowns. Materials for fixing temporary crowns.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
35.	Modern technologies for manufacturing porcelain crowns and bridges. The concept of CAD / CAM systems. Technological process, materials used.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
36.	Orthopedic treatment in the complete absence of a tooth crown. Pin structures and their elements. Requirements for intra-root pins. Indications and contraindications for the use of pin structures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
37.	Preparation of hard tooth tissues in the complete absence of a tooth crown. Tools used to expand the root canal. Features of preparation of the root canal (s) of teeth. Requirements for the condition of the root and surrounding tissues. Materials used for manufacturing pin structures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
38.	Orthopedic treatment of total defects of hard tissues of dental crowns. Types of orthopedic pin structures (pin teeth and stump crowns). Preparing the root. Modern technologies for manufacturing pin structures. Materials.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
39.	Modern methods of restoration of the destroyed crown of a tooth of multi-root teeth. Composite stump pin tabs, stump tabs with the main guide pin, and a tab within a tab.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
40.	Partial absence of teeth: etiology, pathogenesis, clinic. Classification of dentition defects (Kennedy, E. I. Gavrilov, Wild et al.). Influence on the functional state of the dentoalveolar system. Treatment goals for partially missing teeth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
41.	Features of the study of the maxillary system in the partial absence of teeth. Prosthetics for dentition defects of various localization and extent. Classification of prosthetics.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
42.	Clinical and laboratory stages of treatment of partial tooth loss with fixed denture structures. Soldered and solid-cast bridge prosthetics.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
43.	Justification of the use of bridge prostheses. Elements of bridge prostheses, their characteristics. Requirements for bridge prostheses. Materials used for the manufacture of bridge prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
44.	Biomechanics of bridge prostheses. Basic principles of designing bridges. Types of the intermediate part. Indications for the treatment of dentition defects with one-sided bridge prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
45.	Bridge prostheses with one-sided support (cantilever). Indications and contraindications for use. Composite bridge prostheses. Supply of bridge prostheses of various designs for supporting teeth. Criteria for evaluating the quality of a bridge prosthesis.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
46.	Clinical and laboratory stages of manufacturing metal-acrylic, metal-composite and metal-ceramic bridge prostheses. Tactics of hard tissue and periodontal protection of supporting teeth. Purpose and methods of manufacturing temporary crowns.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

47.	Clinical and laboratory stages of metal-free prosthetics bridge-like prostheses. CAD / CAM technologies for manufacturing bridges. Modern approaches to determining the color of teeth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
48.	Orthopedic treatment of partial absence of teeth using adhesive bridges. Clinical and laboratory stages of manufacturing metal-free bridge prostheses (ceramic, composite reinforced).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
49.	Errors and complications in orthopedic treatment of partial absence of teeth with bridge prostheses. Troubleshooting options. Forecast.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
50.	Biological, clinical and mathematical justifications for the choice of treatment method for partial absence of teeth. Justification of prosthetics with bridge, clasp and removable lamellar prostheses using the odontoparodontogram of V. Y. Kurlyandsky.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
51.	Breakdown of the functional and morphological unity of the dentoalveolar system into groups. Their characteristics. Periodontal reserve forces. Odontoparodontogram. Functional overload of periodontal abutment teeth in their partial absence. The concept of traumatic occlusion and traumatic syndrome.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
52.	Clinical and functional methods of evaluation of prosthetic bed tissues. Pliability and pain sensitivity of the oral mucosa.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
53.	Types of removable dentures used in the partial absence of teeth. Indications for use and structural elements of removable plate prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
54.	Partial absence of teeth. Morphological, functional, aesthetic, psychological, and phonetic disorders. Influence of partial absence of teeth on the state of the human body.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
55.	Methods of fixing removable plate prostheses. Types of clamps and their components, purpose. Selection of the number, location and condition assessment of teeth for кламмерной clamp fixation. Concepts: "point", "linear" and "planar" arrangement кламмеров of clamps in the base of the prosthesis.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
56.	Indications for the use of removable plate prostheses in the partial absence of teeth. Structural elements of the prosthesis and their characteristics.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
57.	Clinical and laboratory stages of manufacturing removable plate prostheses in the partial absence of teeth with кламмерной clamp fixation system.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
58.	Method for determining central occlusion in the partial absence of teeth. Errors in determining central occlusion and methods for their elimination.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
59.	Checking the wax structure of a removable plate prosthesis in the partial absence of teeth and criteria for clinical evaluation. Boundaries of the prosthesis base. The most common errors detected during design verification. Troubleshooting methods.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
60.	Technical techniques used in the manufacture of removable plate prostheses with a кламмерной the fixing system. Basic and auxiliary materials used in the manufacture of removable dentures. Methods of curing a plastic base.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
61.	Method of fitting and applying a removable prosthesis in the partial absence of teeth. Correction of the prosthesis base. Clinical relocation, indications for use, materials used.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2



62.	Clinical and laboratory stages of manufacturing cover removable dentures using intra-root fixing devices. Standard and individually manufactured intra-root retainers. Advantages and disadvantages.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
63.	Methods of relocating the base of a removable prosthesis. Indications for use. Materials used for moving prosthetics. Rules and sequence of the event.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
64.	The problem of adaptation to dentures. Adaptation phases. The degree of restoration of tactile and taste sensitivity.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
65.	Effect of plate prostheses on prosthetic bed tissues and supporting teeth. Allergic and chemical-toxic stomatitis. Etiology, pathogenesis, clinic, differential diagnosis, treatment principles.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
66.	Indications for the use of removable dentures with a two-layer base. Clinical and laboratory stages of manufacturing a prosthesis with a two-layer base. Elastic base materials. Services of elastic base materials.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
67.	Clasp prostheses. Indications for use. Positive and negative aspects of clasp prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
68.	Main and additional structural elements of clasp prostheses, their purpose and location in relation to the tissues of the prosthetic bed.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
69.	"Prosthesis and prosthetic bed", "prosthesis and prosthetic field". Side effect of prostheses on the tissues of the prosthetic bed.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
70.	Features of research and preparation of dentition rows when planning the design of clasp prostheses. КляммернаяClamp system for fixing clasp structures. Regularities of selection and distribution of the clamp fixation system.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
71.	The concept of кляммерныхclamp lines and the clinical equator of the tooth. Planning the design of a clasp prosthesis. Parallelometry. Parallelometry methods. Concept of the route of introduction and removal of the prosthesis	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
72.	Biomechanics of the clasp prosthesis: statics and dynamics of the "on" and " end " saddles. Factors that determine the choice of the method of connecting кляммеровclamps to prosthesis saddles.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
73.	The problem of the "end seat" and the included seat in the design of clasp prostheses. Ways to solve this problem. Design features of clasp prostheses for Kennedy class 2 and 4 defects.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
74.	Clinical and laboratory stages of manufacturing soldered and solid-cast clasp prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
75.	Clinical and laboratory stages of manufacturing removable plate prostheses with a metallized base in the partial absence of teeth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
76.	Errors and complications in the treatment with clasp prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
77.	ИммедиатImmediate prostheses, indications for use. Clinical and laboratory stages of manufacturing иммедиатan immediate prosthesis.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

78.	Fixing of removable plate and clasp plates dentures with partial absence of teeth. Types of fixing elements. Advantages and disadvantages of various locking systems.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
79.	Causes of breakage of removable dentures and methods of their elimination.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
80.	Comparative characteristics of bridge-like, removable dentures with partial absence of teeth and clasp dentures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
81.	Increased tooth erasure. Definition of the concepts of "physiological", "delayed", "increased" erasure of hard tooth tissues. Etiology. Pathogenesis. Localized form of increased erasure. Methods of orthopedic treatment.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
82.	Increased erasure of hard tooth tissues. Features of orthopedic treatment and features of complex rehabilitation of patients with generalized form, preventive measures, medical examination, prognosis. ICD10-(K03. 0).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
83.	Features of orthopedic treatment of senile patients with fixed, removable prostheses. Phonetic adaptation to dentures in the absence of teeth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
84.	Examination of patients with extensive dentition defects. Clinic. Indications and contraindications for the preservation of single-standing teeth and tooth roots. Orthopedic treatment with removable dentures. Features of preparation of supporting teeth and tooth roots for telescopic crowns and intra-root attachments.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
85.	Periodontal diseases. Classification, etiology, pathogenesis, clinic of periodontal diseases. Tasks of the orthopedic stage and its place in complex treatment.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
86.	Methods of examination of periodontal tissues. Periodontal reserve forces. Their importance in the clinic of orthopedic dentistry.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
87.	Odontoparodontogram of V. Y. Kurlyandsky and its analysis. Diagnostic significance of odontoparodontogram for the choice of orthopedic structures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
88.	Traumatic periodontal overload. Selective grinding of teeth in periodontal diseases.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
89.	Complex therapy of periodontitis. Types of dentition stabilization. Classification of tires.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
90.	Temporary splinting at the stages of treatment of periodontal diseases, indications for the use of temporary splints, types of temporary splints and methods of their manufacture.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
91.	Focal periodontitis. Etiology, pathogenesis, clinic. Orthopedic treatment of focal (localized) periodontitis.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
92.	Generalized periodontitis. Etiology. Pathogenesis. Clinic. Treatment. Orthopedic methods of treatment of generalized periodontitis.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
93.	Indications for tooth extraction in periodontal diseases. Direct prosthetics for periodontal diseases (иммедиагimmediate prostheses). Manufacturing techniques.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

94.	Rehabilitation of patients with periodontal diseases at the stages of orthopedic treatment. Forecast. The role of oral hygiene in patients with dentures in periodontal diseases.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
95.	Orthopedic treatment of patients with removable dentures in the partial absence of teeth and periodontal diseases.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
96.	Orthopedic treatment of patients with periodontal diseases with clasp splinting prostheses with a locking system on the support-retaining clamps. Parallelometry. Methods of parallelometry.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
97.	Clinical and laboratory stages of manufacturing solid cast splinting clasp prostheses with кламмерной clamp fixation.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
98.	Orthopedic treatment of patients with periodontal diseases and partial absence of teeth with clasp prostheses with a telescopic or beam fixation system.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
99.	Diagnostic, tactical and technical errors in orthopedic treatment of patients with periodontal diseases.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
100.	Implantation materials. Biotechnical standards of intraosseous dental implants (designs, dimensions, surface treatment, manufacturing methods, tools). Morphology биосовместимости of implant biocompatibility (mechanisms of osteogenesis during implantation).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
101.	Examination methods and determination of anatomical and topographic conditions for implantation. Indications and contraindications for dental implantation.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
102.	Planning, features of orthopedic treatment based on intraosseous implants. Equipment and tools.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
103.	Sequence of clinical and laboratory stages of orthopedic treatment based on implants in one-stage, two-stage implantation.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
104.	Orthopedic treatment with removable structures of prostheses supported on dental implants.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
105.	Errors and complications after dental prosthetics on implants. Hygiene measures required in the presence of orthopedic structures on dental implants in the oral cavity.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
106.	Diagnostics and prevention of complications in orthopedic treatment with various types of dentures and devices. Errors and complications at the stages of orthopedic treatment. Principles of deontology.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
107.	Diagnostic and tactical errors, complications in orthopedic treatment of patients with partial and complete absence of teeth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
108.	Pathological changes in the state of the body, tissues and organs of the mouth associated with the presence of dentures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
109.	Features of orthopedic treatment of patients with chronic diseases of the oral mucosa.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
110.	Clinic of complete absence of teeth. Anatomical and topographical features of the structure of toothless jaws. Morphofunctional changes in	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

	hard and soft tissues of the maxillary system as a result of the loss of all teeth. Classification of toothless jaws.	
111.	Concepts of "compliance" and "mobility" of the oral mucosa in the complete absence of teeth. Classification of Supple. Lund compliance zones. Buffer zones according to E. I. Gavrilov. Topography. Significance for orthopedic treatment.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
112.	Purpose and methods of making individual spoons. Materials for making individual spoons.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
113.	Biomechanics of the lower jaw. Patterns of articulation and occlusion of dentition. The laws of articulation of Bonneville, Hanau. Extra- and intraoral recording of mandibular movements. Ganau's articulatory "five".	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
114.	Herbst functional tests. Borders of the prosthetic bed. Method of storing rigid individual spoons using Herbst samples Гербста.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
115.	Methods of fixing and stabilizing removable dentures in the complete absence of teeth. Features of fixing dentures on toothless jaws.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
116.	Functional prints. Classification. Selection of the material and method of obtaining the impression.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
117.	Determination of the central ratio of the jaws with complete tooth loss. Anatomical and physiological method for determining and fixing the central ratio of the jaws.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
118.	Topographical features of the structure of the toothless upper and lower jaws. Relationship of alveolar ridges of toothless jaws in different types of bite.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
119.	Anthropometric guidelines and clinical methods for determining the color, shape and size of artificial teeth in prosthetics of toothless jaws. Methods for determining the cutting edge of artificial teeth in the toothless upper jaw and finding the level of the occlusal plane.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
120.	Checking the design of a removable plate prosthesis in the complete absence of teeth. Errors in determining the central ratio of toothless jaws and methods for their elimination.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
121.	Laws of articulation. Joint theory (balancing theory) Giesey, Ganau. Principles of placement of artificial teeth of these authors. Monson's spherical articulation theory Монсона. Principles of placement of teeth on spherical surfaces.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
122.	Devices reproducing the movements of the lower jaw. Occludators and articulators. Types of articulators.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
123.	Construction of artificial dentition in the complete absence of teeth with orthognathic relationship in the occluder on glass (Vasiliev method).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
124.	Construction of dentition rows in the complete absence of teeth in various types of articulators (universal, sredneanatomicheskie).	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
125.	Features of placement of artificial teeth in the prognathic and prognathic ratio of toothless jaws. Basic and auxiliary materials used in the manufacture of removable plate prostheses.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

126.	Provision and application of removable dentures for toothless jaws. Evaluation of the effectiveness and functional stability of removable dentures. Recommendations to the patient.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
127.	Clinical and laboratory stages of manufacturing dentures in the complete absence of teeth. Aesthetic patterns in the manufacture of removable dentures in the complete absence of teeth.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
128.	Rules for the correction of removable plate prostheses in the complete absence of teeth. Relocation. Indications. Relocation methods.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
129.	Adaptation of the patient to removable dentures in the complete absence of teeth. Reaction of prosthetic bed tissues to removable dentures.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
130.	Prostheses with a metal and combined two-layer base in the complete absence of teeth. Indications for use. Features of manufacturing.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2
131.	Volumetric modeling of prosthesis bases with complete tooth loss. The zone of "muscular balance" and its meaning.	OPK-6.1.3; OPK-12.1.3; OPK-13.1.2

#### 1.2.4. Example of an examination card for practical skills assessment

federal State Budgetary Educational Institution of Higher Education "Volgograd State  
Medical University"  
of the Ministry of Health of the Russian Federation

Department: orthopedic Dentistry with a course in clinical dentistry  
Discipline: Orthopedic dentistry  
Specialty in the specialty 31.05.03 Dentistry, orientation (profile) Dentistry  
Academic year: 20\_\_ -20\_\_

Exam ticket #1.

Exam questions:

1. Clinical situational task.
2. Performing manipulation: "Preparation of a tooth for a metal-ceramic crown".
3. Protection of previously performed manipulation on the phantom model in the semester: drawing the frame of the clasp prosthesis.

M. P.                      Head of the Department \_\_\_\_\_ V. I. Shemonaev

#### 1.2.5. Example of an exam card for an interview

federal State budgetary Educational Institution of Higher education "Volgograd State Medical  
University"  
of the Ministry of Health of the Russian Federation

Department: orthopedic Dentistry with a course in clinical dentistry  
Discipline: Orthopedic dentistry  
Specialty in the specialty of 31.05.03 Dentistry, orientation (profile) Dentistry  
Academic year: 20\_\_ -20\_\_

Exam ticket #1.

Exam questions:

1. Methods of examination of periodontal tissues. Periodontal reserve forces. Their importance in the clinic of orthopedic dentistry.
2. Implantation materials. Biotechnical standards of intraosseous dental implants (designs, dimensions, surface treatment, manufacturing methods, tools). Morphology биосовместимости of implant biocompatibility (mechanisms of osteogenesis during implantation).
3. Rules for the correction of removable plate prostheses in the complete absence of teeth. Relocation. Indications. Relocation methods.

M. P. Head of the Department \_\_\_\_\_ V. I. Shemonaev

The full fund of assessment tools for discipline / practice is available in the EIES of VolgSMU at the link (s):

<https://www.volgmed.ru/apprentice/kafedry/kafedra-ortopedicheskoy-stomatologii-s-kursom-klinicheskoy-stomatologii/faylovyi-menedzher/24670/>

Considered at the meeting of the Department for Prosthetic dentistry with course of clinical dentistry "23" May 2023, protocol No 10.

Head of the Department



V.I. Shemonaev