

CONTROL AND MEASURING DEVICES

Program questions for intermediate certification

Name of discipline: Materials science in orthopedic and therapeutic dentistry

Discipline code: MSOTD 1208

OP name and code: 6B10117 - "Dentistry"

Amount of study hours/credits: 90/3

Course and semester of study: 1st year, II

SHYMKENT

2025-2026 academic year

Compiled by: assistants of the department,

1. Shamakhanova Z. I

2. Ospanova S.T.

Head of the Department, Candidate of Medical Sciences, Acting Associate Professor  **A.B. Shukparov**

Protocol: no. 11 from "23" 06 20 25 G.

Program questions for intermediate certification № 1

1. Classification of dental materials. Dental laboratory.
2. Materials used in orthopedic dentistry.
3. Safety and prevention of occupational diseases.
4. Ergonomics. The main tasks of ergonomics in dentistry.
5. Basic requirements for dental materials in the clinic of therapeutic dentistry.
- Classification and general characteristics of materials.
6. Personal safety rules when working in a dental laboratory.
7. Plastics used in dentistry. Classification of plastics.
8. Dental cements based on water, inorganic and polymer. Classification of cements.
9. Polymer composites, general characteristics and classification.
10. Dental abrasives. Classification.
11. Ceramic masses, porcelain. Composition and properties. Advantages and disadvantages.
12. Metals. Metal alloys and their characteristics.
13. Dental materials science. Classification of dental materials.

CONTROL AND MEASURING DEVICES

Program questions for intermediate certification

Name of discipline: Materials science in orthopedic and therapeutic dentistry

Discipline code: MSOTD 1208

OP name and code: 6B10117 - "Dentistry"

Amount of study hours/credits: 90/3

Course and semester of study: 1st year, II

SHYMKENT

2025-2026 academic year


Compiled by: assistants of the department,

1. Shamakhanova Z. I

2. Ospanova S.T.

Head of the Department, Candidate of Medical Sciences, Acting Associate Professor  **A.B. Shukparov**

Protocol: no. 11 from "23" 06 20 25 G.

<p>ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ</p>		<p>SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»</p>
<p>Department of Surgical and orthopedic dentistry</p>		
<p>CONTROL AND MEASURING DEVICES</p>		
<p>45/11</p>		
<p>Page 6 of 6</p>		

Program questions for intermediate certification №2

1. X-ray machines for X-ray diagnostics, radiovisiograph, OPTG, CT.
2. Materials used to restore teeth and the dental system in orthopedic dentistry.
3. Auxiliary metals. A rapidly soluble alloy.
4. The composition of dental ceramics.types of ceramics and technology of its application.
5. Devices that simulate the movements of the lower jaw. Occludators and articulators. Samson's device, a slot mater. Destiny.
6. Classification of basic materials. Elastic base materials.
7. Classification of suture materials, application.
8. Classification of impression materials and their characteristics.
9. Auxiliary materials used in the dental laboratory. Gypsum. Wax. Molding materials.
10. Definition and classification of composites. Comparative characteristics of composites of various classes.
11. Materials for filling root canals. Classification of material properties. Gutta-percha pins for filling root canals.
12. Stainless steel: steel, chrome-cobalt alloy. Characteristics of stainless metals.