

APPROVE  
Head of department of Prosthetic  
Dentistry and Orthodontics  
of BSMU, Associate Professor



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**Belarusian State Medical University**  
**Questions for examination IV course**

1. Orthodontics as a separate field of dentistry. Purpose, tasks. Main directions of development of orthodontics.
2. Organization of work and material equipment of an orthodontic office, orthodontic instruments.
3. Classification of impression materials. Requirements in dentistry. Specific features of making an impression in pediatric dentistry.
4. Elastic irreversible impression materials (water free elastomers). Features, advantages and disadvantages. Scope in dentistry.
5. Elastic irreversible impression materials (alginate hydrocolloids). Features, advantages and disadvantages. Scope in dentistry.
6. Anthropometric method in orthodontics: head and jaws planes.
7. Anthropometric lateral and medial head points.
8. Vertical and horizontal face parameters.
9. Evaluation of esthetics of the face: Garzon morphological index and interpretation.
10. Evaluation of esthetics of the face: esthetic plane of Ricketts, profile types, according to F. Y. Horoshilkina.
11. Working and diagnostic dental casts. Requirements to the working and diagnostic dental casts. Specific features of dental casts manufacturing.
12. Method of measurement of dental casts by Nanse.
13. Method of measurement of dental casts by Merrifield.
14. Method of measurement of dental casts by Little.
15. Method of measurement of dental casts by Johnston-Tanaka's.
16. Method of measurement of dental casts by Moyers.
17. Method of measurement of dental casts by Pont.
18. Method of measurement of dental casts by Korkhauz.
19. Study of diagnostic plaster casts by Gerlah.
20. Study of diagnostic plaster casts by Snagina.
21. Study of diagnostic plaster casts by Shmudt.
22. Study of diagnostic plaster casts by Bolton.
23. Orthodontic appliances. Classification of orthodontic appliances by their assignment. Examples.
24. Classification of orthodontic appliances by their work principle. Examples.
25. Classification of orthodontic appliances by their construction and way of fixation. Examples. Anatomical fixation and adhesion.
26. Classification of orthodontic appliances by their localization. Examples.
27. Classification of orthodontic appliances by the point (place) and way of action. Examples.
28. Classification of orthodontic appliances by the type of anchorage. Examples.
29. Remodeling of periodontal tissues during bodily and tipping tooth movement.
30. Principles of orthodontic appliances construction.
31. Classification of clasps applied in orthodontic appliances. Constructive parts of the clasp and their assignment. Features of Adam's clasp construction. Features of C-clasp construction.
32. Vestibular bows: types, assignment, constructive elements, steps of construction.

33. Classification of springs, used in removable orthodontic appliances. Spring's constructive elements. Factors determining springs action.
34. Springs used for single teeth and group of teeth movement. Assignment. Constructive steps and features.
35. Basis plate. Assignment. Borders of the basis plate on the maxilla and mandible.
36. Clinical and lab steps of removable single-jaw orthodontic appliance fabrication by hot polymerization method.
37. Clinical and laboratory stages of manufacturing of functional removable orthodontic appliance by method of resin hot polymerization.
38. Clinical and laboratory stages of manufacturing a single-jaw removable orthodontic appliance by method of cold polymerization under pressure.
39. Clinical and laboratory stages of manufacturing functional removable orthodontic appliance by method of cold polymerization under pressure.
40. Manufacturing of the orthodontic appliance by the method of pneumovacuum formation of the basis.
41. Screws: purpose, design. Classification of screws. Screws for intermaxillary action.
42. Screws for individual teeth movement. Screws for movement of groups of teeth. Types, design features. Rules for installing screws in orthodontic devices.
43. Screws for normalization of dental arch shape. Types, design features. Rules for installing screws in orthodontic devices.
44. Characteristics of the first period of occlusion formation.
45. Characteristics of the II period of occlusion formation.
46. Characteristics of the III period of occlusion formation.
47. Characteristics of the IV period of occlusion formation.
48. Characteristic of the V period of occlusion formation.
49. Classification of malocclusion by E. Angle, advantages and disadvantages.
50. Clinical method of diagnostics in orthodontics.
51. Clinical functional tests.
52. The order of making an orthodontic diagnosis according to Horoshilkina classification.
53. Intraoral radiography of teeth. The procedure, the magnitude of the radiation load. The use of the method in orthodontics.
54. Panoramic radiography. The method of carrying out the research, the magnitude of the radiation load. The use of the methods in orthodontics.
55. Radiography of the median palatine suture. The method of carrying out the research, the magnitude of the radiation load. The use of the method in orthodontics.
56. Hand-wrist radiography. The use of the method in orthodontics.
57. Cephalometric analysis. The use of the method in orthodontics. Technique, radiation dose. Determination of the length of the apical bases on the cephalogram.
58. Cephalometric analysis. The use of the method in orthodontics. Technique, radiation dose. Determination of the position of the jaws on the cephalogram.
59. Radiography and tomography of the TMJ. The use of the methods in orthodontics.
60. Cone beam computed tomography. Method of carrying out the research, the radiological load. Informativeness of the method in orthodontics
61. Functions of the dentoalveolar system. Methods of diagnostics of breathing and swallowing functions.
62. Functions of the dentoalveolar system. Methods of diagnostics of chewing and speech formation functions.
63. Electromyography and myotonometry of masticatory and facial muscles. Aim and tasks. Techniques, interpretation of results.
64. Decreased endurance of masticatory and facial muscles. Loading doses, depending on the degree of muscle endurance decrease.

65. Methods of treatment of dentoalveolar anomalies. Characteristics, indications for use depending on the period of occlusion formation.
66. Myotherapy. Purpose, age indications for use in orthodontics. Carry out rules.
67. Orthodontic (appliances) method of treatment of dentoalveolar anomalies. Conditions necessary for teeth movement.
68. Complex method of treatment of dentoalveolar anomalies. Orthodontic indications for teeth extraction.
69. Surgical method of treatment of dentoalveolar anomalies. Types of surgical operations.
70. Mechanically-acting orthodontic appliances: characteristics, design features, examples. Types of tooth movement and appliances which provide these movements.
71. Functionally-directing appliances: characteristics, design features, examples. Usage possibilities.
72. Functionally-acting appliances: characteristics, design features, principles of operation. Types. Usage possibilities.
73. Orthodontic appliances of combined action: characteristics, design features, examples. Usage possibilities.
74. Prosthetic method of treatment of dentoalveolar anomalies. Indications for use to eliminate the defects of teeth, dentitions and jaws in patients with temporary bite.
75. Prosthetic method of treatment of dentoalveolar anomalies. Indications for use to eliminate the defects of teeth, dentitions and jaws in patients with mixed and permanent bite.
76. Special features of children's removable dentures. Terms of replacement of removable dentures, depending on the period of formation of occlusion.
77. Types of crowns (bands) used in orthodontics: purposes, manufacturing features. Temporary and permanent teeth preparation for orthodontic crowns (rings).

The list of issues was approved at a meeting of the department, protocol dated 05/03/2024 No. 12