

ORTHODONTICS STATE EXAM SYNOPSIS

1. Primary dentition. Characteristics and special features of the dental arches.
2. Mixed dentition. Formation, stages, and characteristics. Transitory discrepancies in the dental arches during mixed dentition.
3. Permanent dentition. Formation, stages, characteristics and development.
4. Normal occlusion in primary, mixed and permanent dentition.
5. Postnatal maxillofacial development.
6. Etiology of the malocclusions – impact of the hereditary and external etiological factors on prenatal development. Endocrine disorders and avitaminoses.
7. Etiology of the malocclusions – infant delivery and feeding during the infancy period as a predisposition for the development of malocclusions.
8. Etiology of the malocclusions – anodontia, hypodontia and hyperodontia.
9. Etiology of the malocclusions – oral habits.
10. Etiology of the malocclusions – caries of the primary teeth and premature loss of primary and permanent teeth. Fracture and trauma of the teeth during childhood.
11. Etiology of the malocclusions – obstructed nasal breathing and the mouth breathing as an oral habit.
12. Clinical evaluation (status and anamnesis).
13. Biometric methods of analysis.
14. Orthodontic radiological examination methods.
15. Profile cephalogram.
16. Functional assessment of the orofacial system. Clinical diagnostic procedures.
17. The “Norm” notion in orthodontics. Orthodontic terminology. Classification of the malocclusions. Angle’s classification.
18. Organization of the primary orthodontic prevention from the prenatal and postnatal period in primary dentition formation stage.
19. Primary and secondary orthodontic prevention of the malocclusions from 3 to 6 years of age.
20. Primary and secondary orthodontic prevention of the malocclusions in school age children.
21. Myofunctional therapy.
22. Preventive orthodontic appliances – passive, active and space maintainers. Prefabricated myofunctional appliances.
23. Fixed appliances: edgewise and straight wire appliance. Main features, principles and stages of edgewise appliance orthodontic treatment. Biomechanics – general concepts.
24. Extraoral orthodontic appliances – main features and principles.
25. The active plate – construction and indications.
26. Functional appliances, based on the inclined plane principle - activator, monobloc, Schwarz appliance and active plate with upper anterior inclined bite plane.
27. Fränkel functional regulator.
28. Klammt elastic open activator.
29. Balters bionator.
30. Discrepancies in tooth shape, size, and position. Clinical implications, diagnosis, prevention and treatment.
31. Tooth number discrepancies. Impacted and persistent teeth. Clinical implications, diagnosis, prevention and treatment.
32. Diastemas and tremas. Clinical implications, diagnosis, prevention and treatment.
33. Dento-alveolar and skeletal constriction of the dental arches. Clinical implications,

diagnosis, prevention and treatment.

- 34.** Dento-alveolar and skeletal expansion of the dental arches. Dentoalveolar and skeletal. Clinical implications, diagnosis, prevention and treatment.
- 35.** Protrusion (proclination of the incisors). Clinical implications, diagnosis, prevention and treatment.
- 36.** Retrusion (retroclination of the incisors). Clinical implications, diagnosis, prevention and treatment.
- 37.** Maxillary prognatism (skeletal and dental class II). Clinical implications and diagnosis. Prevention and treatment of the maxillary prognatism.
- 38.** Mandibular prognatism (skeletal and dental class III). Clinical implications and diagnosis. Prevention and treatment of the mandibular prognatism.
- 39.** Laterognathia. Clinical implications and diagnosis. Prevention and treatment of the laterognathia.
- 40.** Open bite. Clinical implications and diagnosis. Prevention and treatment of the open bite.
- 41.** Deep bite. Clinical implications and diagnosis. Prevention and treatment of the deep bite.
- 42.** Anterior crossbite and posterior crossbite. Clinical implications, diagnosis, prevention and treatment.
- 43.** Role of the orthodontist in the combined orthodontic-prosthetic and orthodontic-periodontal treatment.
- 44.** Role of the orthodontist in the combined orthodontic-surgical treatment.
- 45.** Tooth extractions in the orthodontic treatment planning.
- 46.** Relapse after orthodontic treatment. Retention period and retention appliances.
- 47.** Tissue changes during orthodontic treatment as a result of orthodontic appliance therapy.