

## **ORTHODONTICS EXAM SYNOPSIS**

1. Short history of orthodontics. Orthodontic terminology. The “Norm” notion in orthodontics. Classification of the malocclusions.
2. Normal prenatal development from orthodontic perspective.
3. Primary dentition. Formation, stages, and characteristics.
4. Mixed dentition. Formation, stages, and characteristics. Transitory discrepancies in the dental arches during mixed dentition.
5. Permanent dentition. Formation, stages, and characteristics. Transitory discrepancies in the dental arches during mixed dentition.
6. Normal occlusion in primary, mixed and permanent dentition.
7. Postnatal maxillofacial development.
8. Etiology of the malocclusions – impact of the hereditary and external etiological factors on prenatal development. Endocrine disorders and avitaminoses.
9. Etiology of the malocclusions – infant delivery and feeding during the infancy period as a predisposition for the development of malocclusions.
10. Etiology of the malocclusions – anodontia, hypodontia and hyperodontia.
11. Etiology of the malocclusions – oral habits.
12. 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.
13. Etiology of the malocclusions – obstructed nasal breathing and the mouth breathing as an oral habit.
14. Orthodontic anamnesis and status.
15. Single arch analysis and evaluation of the occlusion in deciduous, mixed and permanent dentition.
16. Photographic analysis of the face – profile and en face.
17. Orthodontic radiological examination methods.
18. Lateral cephalogram.
19. Functional assessment of the orofacial system. Clinical diagnostic procedures.
20. Organization of the primary orthodontic prevention from the prenatal and postnatal period to primary dentition stage.
21. Primary and secondary orthodontic prevention of the malocclusions from 3 to 6 years of age.
22. Primary and secondary orthodontic prevention of the malocclusions in school age children.
23. Myofunctional therapy.
24. Interceptive orthodontic appliances – passive, active and space maintainers. Prefabricated interceptive appliances.
25. Fixed appliances: edgewise and straight wire appliance. Main features, principles and stages of edgewise appliance orthodontic treatment. Biomechanics – general concepts.
26. Extraoral orthodontic appliances – main features.
27. Removable orthodontic appliances with mechanical action – the active plate.
28. Active plate with upper anterior inclined bite plane and Schwarz appliance.
29. Activator, monoblock.
30. Fränkel functional regulator.
31. Klammt elastic open activator.
32. Balters bionator.
33. Discrepancies in tooth shape, size, and position. Clinical implications, diagnosis, prevention and treatment.

34. Tooth number discrepancies. Clinical implications, diagnosis, prevention and treatment.
35. Impacted and persistent teeth. Clinical implications, diagnosis, prevention and treatment.
36. Diastemas and tremas. Clinical implications, diagnosis, prevention and treatment.
37. Dento-alveolar and skeletal constriction of the dental arches. Clinical implications, diagnosis, prevention and treatment.
38. Dento-alveolar and skeletal expansion of the dental arches. Dentoalveolar and skeletal. Clinical implications, diagnosis, prevention and treatment.
39. Protrusion (proclination of the incisors). Clinical implications, diagnosis, prevention and treatment.
40. Retrusion (retroclination of the incisors). Clinical implications, diagnosis, prevention and treatment.
41. Maxillary prognathism (skeletal and dental class II). Clinical implications and diagnosis.
42. Mandibular prognathism (skeletal and dental class III). Clinical implications and diagnosis.
43. Laterognathia. Clinical implications and diagnosis.
44. Open bite. Clinical implications and diagnosis.
45. Deep bite. Clinical implications and diagnosis.
46. Anterior crossbite. Clinical implications, diagnosis, prevention and treatment.
47. Posterior crossbite. Clinical implications, diagnosis, prevention and treatment.
48. Prevention and treatment of the maxillary prognathism (skeletal and dental class II).
49. Prevention and treatment of the mandibular prognathism (skeletal and dental class III).
50. Prevention and treatment of the open bite.
51. Prevention and treatment of the deep bite.
52. Prevention and treatment of the laterognathia.
53. Role of the orthodontist in the combined orthodontic-prosthetic and orthodontic-periodontal treatment.
54. Role of the orthodontist in the combined orthodontic-surgical treatment.
55. Tooth extractions in the orthodontic treatment planning.
56. Tissue changes during orthodontic treatment as a result of orthodontic appliance therapy.
57. Relapse after orthodontic treatment.
58. Retention period and retention appliances.

**LIST**  
**on**  
**textbooks and monographs in Orthodontics,**  
**located in the library**  
**/ To help prepare for an exam in orthodontics /**

1. “Orthodontic Syllabus for students”. Prof. Vera Borisova Krumova; DDS, MSD, PhD, Assoc. prof. Laura Stefanova Andreeva; DDS, MSD, PhD, Assoc. prof. Vladimir Ivaylov Pertunov; DDS, MSD, PhD, Assoc. prof. Svetlana Veselinova Yordanova; DDS, MSD, PhD, Assoc. prof. Miroslava Veselinova Yordanova; DDS, MSD, PhD, Dr Greta Rusinova Yordanova; DDS, MSD, PhD, Dr Palmira Todorova Alagyozova; DDS, MSD, PhD, Dr.Krasimira Ivanova Gaydarova; DDS, MSD, Dr Valery Georgiev Petrov; DDS, MSD, Dr Rositsa Mincheva Peicheva; DDS, MSD, Dr Hristina Ivanova Arnautska, Dr Victoria Georgieva Gurgurieva, DDS, MSD, PhD, Dr Vladimir Ivanov Bogdanov, DDS, MSD, Dr Teodora Bojidarova Yordanova, DDS, MSD. ISBN 978-954-420-310-8, English, Sofia, 2014.
2. Gaber T., L.R.Vanarsdall, K. Vig. Orthodontics : Current Principles and Techniques. Elsevier Mosby. 2005; 430 – 435
3. Proffit W., Fields HW, D. Sarver. Contemporary Orthodontics 5<sup>th</sup> ed., Elsevier 2013, 754 p.
4. Manuel H. Marks, Herman Corn. Atlas of adult Orthodontics : Functional and esthetic enhancement, Lea & Febiger, 1989, 645 p.
5. Orthodontic review, Journal englishq S.Akyalcin, T.Peltomaki, K.Litschel, Mosby, 2015, 337 p.
6. Orthodontics – principles and practice. Daljit S. Gill, Fahrad B. Naini, October 2011, Wiley-Blackwell, 384 pages.