

ORTHODONTICS SEMESTRIAL EXAM SYNOPSIS

1. Short history of orthodontics. Orthodontic terminology. Angle's 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.
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 primary, 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. Preventive orthodontic appliances – passive, active and space maintainers.
25. Prefabricated myofunctional appliances.
26. Main features, principles and treatment phases with fixed appliances. Biomechanics – general concepts.
27. Extraoral orthodontic appliances – main features.
28. The active acrylic base plate.
29. Twin Block.
30. Activator, monobloc.
31. Fränkel functional regulator.
32. Klammt elastic open activator.
33. Balters bionator.
34. Discrepancies in tooth shape, size, and position. Clinical implications, diagnosis, prevention and treatment.
35. Tooth number discrepancies. Clinical implications, diagnosis, prevention and treatment.
36. Impacted and persistent teeth. Clinical implications, diagnosis, prevention and treatment.

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