

MEDICAL UNIVERSITY – PLOVDIV, FACULTY OF DENTAL MEDICINE

STATE EXAM SYLLABUS IN PEDIATRIC DENTISTRY

1. Ontogenetic development of maxillofacial region, stages of ontogenetic development, developmental disorders of the maxillofacial region.
2. Ontogenetic development of tooth germ, stages of development of tooth germ, origin and characteristics of tooth germ elements. Morphological and biological features.
3. Histogenesis of the tooth enamel, stages of amelogenesis, factors associated with enamel histogenesis.
4. Morphology and physiology of the tooth enamel, morphologic units, features of enamel associated with childhood.
5. Histogenesis, morphology and physiology of the tooth dentin, features of dentin associated with childhood.
6. Histogenesis, morphology and physiology of the dental pulp, features of pulp associated with childhood.
7. Histogenesis, morphology and physiology of the tooth cementum and periodontal ligament, features associated with childhood.
8. Histogenesis and physiology of the oral mucosa and periodontium, features associated with childhood.
9. Dynamics of primary and permanent dentition development, stages, eruption times and resorption, factors associated with normal and abnormal tooth eruption.
10. Dental anatomy, morphology and physiology of primary and permanent dentition, identifiable features that distinguish primary from permanent teeth, tooth codes.
11. Abnormalities in shape, size, number and position of teeth, their importance in clinical practice.
12. Etiology, pathogenesis and classification of the abnormalities in dental structure (dysplasia), importance in clinical practice.
13. Physiology of the oral cavity, origin, components, functions and salivary role in physiology of the oral cavity.
14. Oral ecosystem – origin and dynamics in childhood, components and defense mechanisms of oral ecosystem
15. Oral microflora, species of microorganisms and types of relationships between them, mechanism of action, age-associated variability.
16. Characteristics of immune system in children, non-specific immune system and specific immune system, defense mechanisms in the oral cavity, development of immune system in children.
17. Oral immunity, immunopathological reactions involved in the pathogenesis of the oral diseases, defense mechanisms of the oral mucosa, saliva and gingival fluid.

18. Dental prevention – aim, principles, types, strategies and forms of dental prevention, prevention resources.
19. Etiology of tooth decay – role of primary and secondary factors.
20. Pathogenesis of dental caries – theories, contemporary concept, exchange processes in the tooth enamel.
21. Histopathology of tooth decay in the enamel and dentin - differential criteria for stages, stages, carious lesion zones, carious process specifications in childhood.
22. Oral hygiene – mechanical and chemical control of dental plaque, factors determining the effectiveness, methods and means for individual and professional oral hygiene, specifics of the mechanical control of dental plaque in childhood.
23. Nutritional prevention of oral diseases – pre-resorptive and post-resorptive effect of nutrition.
24. Use of fluorides for the prevention of dental caries – metabolism of fluoride, effect of fluoride on anticaries activity, toxicity of fluoride.
25. Endogenous fluoride prevention – aims, indications for use, mechanisms of action, factors determining the effectiveness, methods and means
26. Exogenous fluoride prevention – aims, indications for use, mechanisms of action, factors determining the effectiveness, methods and means
27. Mineralizing agents in prevention of dental caries - aims, indications, mechanisms of action, factors determining the effectiveness, methods and means.
28. Sealants in the prevention of dental caries - aim, indications, mechanism of action, factors determining the effectiveness, techniques.
29. Epidemiology of dental caries - contemporary trends, indexes, determining factors, objectives of WHO.
30. Risk assessment and prognosis of oral diseases, risk assessment systems, individual oral risk profile.
31. Prevention programs - types, goals, organization and control.
32. Promotion of oral health - guidelines, principles, strategies, process of health promotion, methods of health promotion, health education.
33. Admission and examination of the child, methods of examination, risk assessment of oral diseases, first dental visit.
34. Psychological problems in pediatric dental practice – factors affecting child's behaviour, evaluation of behaviour and anxiety of the child, pharmacological and nonpharmacological management of the child's behaviour.
35. Caries in primary and permanent teeth in children - anatomical and morphological characteristics, classification, methods of examination, clinical characteristics, features of tooth decay associated with childhood.
36. Non-operative treatment of caries in primary and permanent teeth in children - indications, techniques and materials.

37. Operative treatment of caries in primary and permanent teeth in children - indications, techniques and materials.
38. Early childhood caries – risk factors, characteristics and treatment.
39. Operative caries treatment of primary and permanent teeth in children - characteristics of the amalgam preparation.
40. Operative caries treatment of primary and permanent teeth in children - characteristics of the adhesive preparation.
41. Secondary caries in primary and permanent teeth in children - diagnosis, prevention and treatment.
42. Pulpitis in primary teeth - classification, etiology, pathogenesis, examination methods, clinical characteristics, features associated with childhood, treatment.
43. Pulpitis in permanent teeth - classification, etiology, pathogenesis, examination methods, clinical characteristics, features associated with childhood.
44. Treatment of pulpitis in permanent teeth in children – indications, techniques, results.
45. Inflammation of the periodontal ligament of primary and permanent in children – characteristics of the periodontal ligament, classification, etiology, clinical characteristics.
46. Treatment of teeth with necrotic pulp and inflammation of the periodontal ligament in primary teeth – indications, techniques and materials.
47. Treatment of teeth with necrotic pulp and inflammation of the periodontal ligament in permanent teeth – indications, techniques and materials.
48. Traumatic injuries of primary and permanent teeth - prevalence, classification, etiology, methods of examination.
49. Traumatic injuries of primary teeth - clinical characteristics and treatment of different trauma types.
50. Traumatic injuries of permanent teeth in children – Contusio dentis, Luxatio dentis /Lateral, Intrusio, Extrusio dentis/, Expulsio dentis - clinical characteristics and treatment.
51. Fracture of hard dental tissues in permanent teeth - clinical characteristics and treatment – restoration techniques.
52. Complications in primary and permanent teeth after trauma.
53. Extraction of primary teeth – indications, anesthesia /premedication, types of anesthesia/, technique, post-extraction complications.
54. Abnormalities in dental structure (dysplasia) - clinical characteristics and treatment.
55. Periodontal diseases in children – classification, examination methods, indexes, periodontal risk assessment.
56. Gingivitis catarrhalis in children – classification, etiology, pathogenesis, clinical characteristics, treatment methods.
57. Gingivitis hypertrophicans in children – classification, etiology, pathogenesis, clinical characteristics, treatment methods.

58. Ulceronecrotic gingivitis in children - classification, etiology, pathogenesis, clinical characteristics, treatment methods.
59. Periodontal diseases in children – aggressive periodontitis – classification, etiology, clinical characteristics and treatment.
60. Periodontal diseases in children associated with systematic diseases – pathogenesis, clinical characteristics and treatment.
61. Periodontal diseases in children associated with developmental or acquired abnormalities – classification of the etiological factors, clinical characteristics and treatment.
62. Gingivostomatitis caused by mechanical, chemical, thermal and other factors – clinical characteristics and treatment. Local changes in the oral mucosa of infants and children – clinical characteristics and treatment.
63. Gingivostomatitis of viral origin: stomatitis aphtosa – classification, etiology, clinical characteristics and treatment.
64. Fungal infection associated with gingivostomatitis, oral candidiasis - classification, etiology, clinical characteristics and treatment.
65. Gingivostomatitis associated with dermatosis, hypovitaminosis, blood disorders in children - clinical characteristics and treatment.
66. Gingivostomatitis associated with systematic factors, gastrointestinal diseases and endocrine disorders in children - clinical characteristics and treatment.
67. Diseases of the lips in children – classification, clinical characteristics and treatment.
68. Diseases of the tongue in children – classification, clinical characteristics and treatment.
69. General guidelines for treatment of the periodontal diseases in children – aim of treatment, early diagnosis, types of periodontal treatment.
70. Oral health in children with AIDS/HIV infection – prevalence, clinical characteristics and treatment.

MK/MF

06.03.2019

**HEAD OF DEPARTMENT: /s/
/Prof. Dr. M. Kukleva, DMD, PhD/**