

SYLLABUS

FOR THE FINAL EXAM IN PROSTHETIC DENTISTRY

1. Optical properties of materials: color, transparency, translucency, fluorescence, opal effect.
2. Color theory – Munsell system for 3-dimensional characteristics of color.
3. Dental shade guides based on the Munsell system.
4. Mechanical properties of dental materials. Strength and Toughness of materials
5. Nobel dental alloys. Gold dental alloys.
6. Errors in processing of dental alloys.
7. Chromium-Nickel alloys.
8. Cobalt-chromium-molybdenum alloys.
9. Properties of dental ceramics. Temperatures of glass transition and softening. Leucite and devitrification.
10. Dental metal-ceramics. Ultra low-fusing ceramics. Hydrothermal ceramics.
11. Alloys used for metal-ceramics fabrication. Nickel allergy.
12. Technology of ceramic and metal-ceramic constructions: sintering, hot isostatic pressing, casting, copy milling and CAD-CAM machining.
13. Metal-ceramic bond. Coefficient of thermal expansion of ceramics and alloys for metal-ceramics.
14. Characteristics of the acrylic resin polymer and monomer. Polymerisation.
15. Zinc-phosphate cements.
16. Poly-carboxylate cements.
17. Glass-ionomer cements. Modified (dual cured) glass-ionomer cements. Cermet glass-ionomer cements.
18. Hard impression materials. Impression plaster (pink). Zinc-oxide-eugenol impression pastes. Self-curing impression materials.
19. Irreversible hydrocolloids (alginates).
20. Condensational type silicone impression materials. Additive type silicon impression materials.

21. Polyether impression materials.
22. Errors in processing and storage of impression materials and impressions.
23. Anatomical and functional characteristics and marks for tooth recognition.
24. Gnatology. Physiological rest position. Articulation and occlusion. Main and boundary positions of the lower jaw.
25. Occlusodontology. Occlusal surface and articulation contacts. Perfect occlusion.
26. Occlusal compensational curves – importance for the prosthetic treatment.
27. Occlusion. Occlusion types.
28. Biomechanics of chewing and lower jaw movements.
29. Combined movements of the lower jaw.
30. Devices for reproduction of the movements of the lower jaw. Occludators and articulators.
31. Functional and age-related changes in the masticatory apparatus. Attrition, abrasion and erosion of the tooth crown.
32. Functional and age-related changes in the periodontium. Changes after partial loss of teeth.
33. Changes after complete edentulism. Biological constants.
34. Retentive clasps – bend, plastic (Kemeny), model casted clasps. Contemporary dento-alveolar clasps.
35. Combined prosthetic constructions. Special retentive elements.
36. Technological stages in the fabrication of model casted removable partial dentures.
37. Fundamentals of dental splinting. Principles for immobilization, stabilization and redistribution of the masticatory forces. Types of splints.
38. Prosthetic constructions for edentulous patients. Types of complete dentures. Principles and methods for retention and stabilization of complete dentures.
39. Methods for placement of artificial teeth – by Gysi, Paterson, Gerber. Placement of artificial teeth in cases of different jaw relationships.
40. Functional pathology of the masticatory apparatus. Mechanism of functional pathology. Terminology of functional pathology.
41. Types of prosthetic restorations.
42. Preparation of the oral cavity for prosthetic treatment.
43. Prosthetic treatment of the tooth crown defects – etiology, classification and prosthetic methods of fabrication of crowns.
44. Treatment of crown defects with partial crowns.
45. Treatment of crown defects with full crowns.
46. Restoration of severely damaged teeth.

47. Tooth preparation for full crowns. Types and methods for preparation of the dental crown. Types of preparation junctions.
48. Types of impressions and impression methods for full crowns.
49. Gingival retraction. Provisional restorations.
50. Adjustment, cementation and removal of full crowns.
51. Clinics of the all-ceramic crown – classical and contemporary methods.
52. Clinics and treatment of the defects of the crown with a dowel core crown.
53. Etiology, pathogenesis and prognosis of the partial edentulism. Classification of partially edentulous dental arches.
54. Preparation of the oral cavity for treatment of partial edentulism. Godon's phenomenon.
55. Fundamental methods and means for treatment of cases with partial edentulism – constructional principles.
56. Medical-biological characteristics of the prosthetic restorations. Indications and contraindications for prosthetic treatment of partial edentulism.
57. Prosthetic treatment of partial edentulism with fixed partial dentures (bridge restorations) – abutment teeth, retainers and pontic. Classification of crowns.
58. Partial crown intracoronal retainers – inlays and onlays. Partial crown extracoronal retainers – Maryland retainers.
59. Planning and construction of fixed partial dentures (bridge restorations) – constructional principles.
60. Clinics of bridge restorations with different types of retainers, cantilevered bridges.
61. Clinics of metal-ceramic bridge restorations.
62. Clinics of all-ceramic bridge restorations.
63. Immediate fixed partial dentures (immediate bridges).
64. Prosthetic treatment of the defects of the dental arches with removable acrylic partial denture. Vertical dimension of the occlusion (VDO) fixation. Individual and constructional principles.
65. Clinics of removable partial dentures with bar attachments.
66. Clinics and planning of model casted removable partial dentures.
67. Special retentive elements. Types of precision attachments. Classification.
68. Clinics of removable partial dentures with precision attachments.
69. Milled model casted prostheses and partial removable dentures with telescopic-crown attachments.
70. Combined Prosthodontics – fixed and removable.
71. Clinics of Kemeny removable partial dentures. Removable partial dentures without clasps. Removable partial dentures shaped according to the speech function of the patient.

72. Clinics of immediate removable partial dentures.
73. Clinics of over dentures (subtotal prostheses).
74. Prosthetic treatment of abrasion and lower vertical dimension of the occlusion (VDO).
75. Occlusal trauma and periodontal diseases.
76. Occlusal trauma diagnostics.
77. Bruxism.
78. Occlusal corrections – selective occlusal preparation. Clinical stages of selective preparation. Preliminary contacts.
79. Dental splints – treatment of the periodontium with removable splints.
80. Dental splints – treatment of the periodontium with fixed splints.
81. Anatomical, morphological, functional and psychological changes of the prosthetic field after complete edentulism.
82. Examination of a patient with complete edentulism.
83. Preliminary impression from edentulous alveolar ridges.
84. Final impression from edentulous alveolar ridges.
85. Determination of maximal intercuspation. Determination of the occlusal plane.
86. Determination of the vertical dimension of occlusion (VDO).
87. Methods for determination of central mandibular position.
88. Special treatment methods after complete edentulism.
89. Dental implantology – diagnostics, planing, materials, methods.
90. Dental implantology – basic principles.
91. Types of dental implants. Screw retained titanium implant.
92. Immediate prosthetic treatment with partial and complete removable dentures.
93. Children prosthetic treatment.
94. Disabilities and diseases caused by prosthetic treatment.
95. Maxillofacial orthopedics – subject, characteristics, classification.
96. Fracture treatment splints of the lower and upper jaw. Forming splints.
97. Prosthetic rehabilitation after upper and lower jaw resection. Prosthetic treatment of palate defects - obturators.
98. Facial prostheses.

Suggested literature:

Да се допълни от списъка с препоръчаната литература!!!

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РЪКОВОДИТЕЛ КАТЕДРА:

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