

Odontotechnology and Prosthodontics Preclinical Course III final exam

General dental knowledge and dental materials

1. Acrylate as crown and bridge material. Acrylate polymerized on heat or on heat and pressurization without investing
2. Anatomy of the permanent teeth, occlusal morphology
3. Articulators, face-bows. Mounting casts.
4. Basic definitions of plastic chemistry. Properties of dental acrylates.
5. Dental acrylates. Pouring acrylates, acrylates processed by injection moulding. Acrylate false teeth.
6. Dental cements.
7. Dental waxes. Impression compound, oroplastic impression materials.
8. Elastomeric impression materials. Alginates and agar-agar based hydrocolloidal impression materials.
9. Fabricating specially accurate casts, casting plastics and super hard gypsum. The metal coating.
10. Gold, platinum and the platinum group of metals. Silver.
11. Impression trays.
12. Investment materials. The technique of expansive investing.
13. Mandibular positions, movements, plains.
14. Metals used in dentistry. Precious metals.
15. Not precious metals. Dental alloys.
16. Shaping of metals. The mouth-tolerance of metals. Chemical and electrochemical corrosion.
17. Silicone, Polysulfide and polyether impression materials.
18. Structure of metals. Melting, crystallization and alloying.
19. The dental gypsum. Types of dental gypsum.
20. The principles of processing dental polymers.
21. The silver alloys, silver-palladium alloys.
22. The stainless dental steel. Methods of producing metal prostheses.
23. Types of dental ceramics. Oxide ceramics.
24. Types of dental ceramics. Silicate ceramics.
25. Types of impressions, classification.
26. Types of prosthetic appliances.
27. Zinc-oxide-eugenol impression paste. Duplicating materials.

Partial dentures

1. Acrylic veneered fixed restorations. Material of the metal base, rules of the construction. Types of the acrylic veneer materials, technologies of the veneer construction.
2. Clinical steps of dowel-core restoration construction. Preparation, impression, protection of the prepared root, cementation.
3. Complex removable partial dentures. Technology of the construction.
4. Component parts of bridges, roles of the parts, principles of the pontic design.
5. Concept of retention and support of removable partial dentures, devices.
6. Construction of acrylic crowns and bridges, technologies, evaluation.
7. Definition of dowel-core restorations, types, indication, conditions of construction.
8. Designing removable partial denture. Purpose, steps, principles.
9. Finishing line preparation types for crowns. Evaluation, design.
10. Gold alloys. Platinum-gold alloys, metal-ceramic gold alloys. Gold-silver-palladium alloys.
11. Impression taking techniques for implant retained prosthetic appliances.
12. Impression techniques during removable partial denture construction.
13. Impression techniques for fixed restorations.
14. Investing, metal casting, finishing and polishing of the casts.
15. Laboratory steps of the metal based removable partial dentures construction.
16. Making casts for complete; and partial removable dentures. Material of the casts.
17. Making casts for fixed partial dentures. Material of the casts.
18. Metal alloys for PFM (porcelain-fused-to-metal) and RPD (removable partial denture) appliances.
19. Metal-ceramic restorations. Material of the metal base, basic rules of the construction. Technology of the ceramic covering material.
20. Parts of fixed bridges, function of the parts. Technologies of bridge constructions.
21. Precision attachments.
22. Principles of crown preparation.
23. Principles of designing the retainers, pontic and the occlusal surface during wax pattern fabrication of bridges.
24. Sequence of the clinical stages and laboratory procedures of the removable partial denture construction.
25. Sequence of the clinical stages and laboratory procedures of the complex removable partial denture construction.
26. Special restorations (obturator, epithetic).
27. Steps of crown preparation for full veneer crowns and bridges.
28. Technologies of the full ceramic restoration constructions.
29. Temporary fixed restoration construction.
30. Tooth shade selection (shade guides, digital devices).
31. Try-in procedure, cementation, and removing of fixed restorations.
32. Types of crowns, comparative evaluation.
33. Types of implant retained prosthetic appliances.
34. Types of removable partial dentures, component parts and the function of the parts.
35. Uniting the parts of metal prostheses. Heat treatment of metals.
36. Wax pattern fabrication of bridges. Fabrication of casted metal crowns.

Complete denture

1. Adjusting the special tray in edentulous cases.
2. Checking the trial denture. Fitting complete dentures.
3. Construction of special tray and occlusal rim. Purpose of application, overview of the used materials.
4. General principles of setting up anterior and posterior teeth. Balanced occlusion.
5. Parts of the complete dentures. Purpose of the parts, types of artificial teeth.
6. Primary (preliminary) impression. Purpose and properties of impression materials for complete dentures.
7. Processing the complete denture. Flasking and packing acrylic resins for complete dentures. Trimming and polishing.
8. Recording jaw relations in edentulous mouth.
9. Secondary (working) impression. Purpose, properties, techniques with impression materials used for complete dentures
10. Selection of the teeth for appearance and mastication.
11. Sequence of the clinical stages and laboratory procedures of the complete denture construction.
12. Setting up the teeth in different articulators.