EXAMINATION QUESTIONNAIRE

FOR WRITTEN EXAMINATION

DENTAL MATERIALS

1. Classification and requirements for dental materials.
2. Structure of dental materials.
3. Thermal volumetric changes of dental materials.
4. Thermal conductivity of dental materials.
5. Imbibition and solubility of dental materials.
6. Wetting and adhesion of dental materials.
7. Strength of dental materials - stress-strain diagram.
8. Toughness and brittleness of dental materials.
9. Hardness of dental materials.
10. Wear resistance and abrasiveness of dental materials.
11. Metals and alloys. Crystallization process.
12. Thermal analysis of metals and alloys.
13. Phase diagram of solid solution alloys.
14. Advantages and disadvantages of dental alloys.
15. Noble dental alloys.
16. Comparative analysis of noble and base metal dental alloys.
17. Factors influencing the electrochemical corrosion in the mouth.
18. Biological considerations of corrosion.
19. Doctor's role to prevent the corrosion in the mouth.
20. Elastic /soft/ dental resins.
21. Dental resins for injection molding technique.
22. Types of gypsum modeling materials.
23. Determination of the initial and the final setting time of gypsum.
24. Comparative analysis of the different types of silicone-based impression materials
25. Composition and preparation of A-silicone impression materials.
26. Toxicity of dental cements.
27. Adhesion of dental cements.
28. Composition and preparation of glass ionomer cements.
29. Composition and preparation of calcium hydroxide cement.
30. Polymerization shrinkage of dental composites.
31. Advantages and disadvantages of dental composites.
32. Comparative analysis of self-curing and light-curing composite materials.
33. Dental amalgams.

EXAMINATION QUESTIONNAIRE

FOR ORAL EXAMINATION

DENTAL MATERIALS

1. Mechanical, physical, biological and technological requirements for dental materials.
2. Optical properties of dental materials.
3. Strength properties of dental materials.
4. Investigation of alloys.
5. Chromium and titanium alloys. Alloys for porcelain-fused-to-metal restorations.
6. Dental polymer resins.
7. Heat-curing acrylic resins in dentistry.
8. Dental porcelains.
9. Dental porcelains used for porcelain-fused-to-metal restorations.
10. Direct restorative materials – classification and requirements.
11. Dental cements.
12. Glass-ionomer cements.
13. Composite restorative materials. Self-curing composite restorative materials in dentistry.
14. Composite restorative materials. Light-curing composite restorative materials in dentistry.
15. Mechanical and biological properties of dental composite restorative materials.
16. Gypsum products – dental plasters and stones.
17. Classification and requirements for dental impression materials.
18. Solid impression materials.
19. Thermoplastic impression materials.
20. Classification and requirements for elastic impression materials used in dentistry.
21. Hydrocolloid impression materials.
22. Elastomeric impression materials.
23. Silicone-based elastomeric impression materials.
24. Dental abrasive materials for finishing and polishing.
25. Requirements for dental investment materials.
26. Types of investment materials.
27. Expansion of investment materials.
28. Fluxes. Chemical and electro-chemical treatment of metal surfaces.

RECOMMENDED LITERATURE

ADDITIONAL LITERATURE

TOPICS FOR INDEPENDENT WORK

1. Basic materials
2. Clinical materials, CONSPECT FOR TRAINING- we send it to you

CHAPTERS FROM THE PROGRAM

1. Auxiliary dental materials - gypsum products,dental waxes,casting investments.
2. Restorative materials.
3.Dental cements,adhesive materials.
4.Impression materials