**QUESTIONS FOR THE PROMOTION EXAM IN**

**ORAL IMPLANTOLOGY DISCIPLINE**

**Discipline code S.08.O.075**

1. History of oral implantology.
2. Structural particularities of the upper jaw and its age-related changes. Innervation and vascularization of the upper jaw.
3. Structural particularities of the alveolar walls.
4. Correlation relationships between dental roots and the maxillary sinus/nasal floor.
5. Correlation relationships between dental roots and the inferior alveolar nerve canal and the internal oblique line.
6. Structural particularities of the lower jaw and its age-related changes. Innervation and vascularization of the lower jaw.
7. Bone density and its practical importance in oral implantology. Classification of bone density according to misch, leckholm, and zarb. Topographic localization of bone density in the jaws.
8. The importance of bone volume in implantology. Classification of bone volume according to misch c.e. requirements for peri-implant bone volume.
9. Particularities of the oral mucosa and its role in oral implantology (keratinized/non-keratinized mucosa, gingival biotype/phenotype).
10. Classification of dental implants (by the number of components, type, macro- and microdesign, shape, material).
11. Titanium and its use in implantology. History. Grades of titanium and their importance in implantology.
12. Osseointegration. Development of the concept of osseointegration. Mechanism of osseointegration and its timelines.
13. General and local factors that can influence the process of osseointegration.
14. Requirements for suture materials and their types. Classification of suture materials.
15. Requirements for flaps in oral implantology. Types of flaps used in implantology.
16. Requirements, peculiarities, and techniques of anesthesia used in oral implantology.
17. Components of removable endosseous dental implants.
18. Instruments, devices, and equipment used in oral implantology.
19. Requirements and correlations between the dimensions (diameter, length) of implants and bone availability.
20. Planning the number of implants depending on the size of the edentulous space/spaces.
21. Paraclinical examination in the diagnosis and treatment of patients with dental implants.
22. The role of cone beam computed tomography (CBCT) in oral implantology. Advantages and disadvantages of CBCT compared to orthopantomography.
23. Surgical stages in implant-prosthetic treatment.
24. Indications and contraindications for the insertion of dental implants.
25. Surgical principles applied for the insertion of endosseous dental implants (requirements for intervention and surgical technique).
26. The crown-to-implant body ratio and its importance in oral implantology.
27. The role of surgical guides in oral implantology. Types of surgical guides.
28. Stages of dental implant insertion using the conventional technique (Branemark).
29. Postoperative management of the wound/patient.
30. Post-implantation healing period. Terms, requirements, and conduct during the healing period.
31. The second surgical session. Techniques for performing and healing timelines for soft tissues.
32. The concept of biological space. Its role and formation timelines. Structure of the peri-implant biological space.
33. Peri-dental and peri-implant biological space. Differentiation characteristics and their importance in the evolution of peri-implant cortical bone.
34. Resorption of peri-implant cortical bone. Early and late bone loss. Acceptable values in oral implantology.
35. Primary and secondary stability of implants. Their role and importance. Methods of assessment (Branemark test, Periotest, Osstel-ISQ).
36. Installation of removable dental implants in a single surgical session. Indications. Contraindications. Technique. Advantages and disadvantages of the method.
37. Post-extraction insertion of implants. ITI classification for implant installation at different post-extraction terms.
38. Classification of sockets depending on the integrity of their walls (according to Elian).
39. Classification of sockets depending on the position of dental roots (Khan 2011).
40. Post-extraction implant insertion technique. Requirements for the socket for immediate implantation.
41. Early installation of implants (type 2 and 3 ITI). Requirements, advantages and disadvantages, surgical technique.
42. The role of biomaterials used in oral implantology.
43. Classification of biomaterials used in oral implantology.
44. Requirements for biomaterials used in oral implantology.
45. Biocompatibility, osteoconduction, osteoinduction, and osteoregeneration. Concepts, types of biomaterials with these properties.
46. Types of bone grafts used in oral implantology.
47. Types of membranes used in oral implantology and their importance.
48. The use of autografts in oral implantology. Techniques for grafting with bone blocks.
49. Intraoral and extraoral harvesting zones for autogenous bone grafts.
50. Advantages and disadvantages of bone addition/augmentation with autogenous grafts.
51. Advantages and disadvantages of bone addition/augmentation with xenografts or allografts compared to autogenous grafts.
52. The technique of bone crest splitting (Osseo-splitting). Indications, advantages, and disadvantages.
53. Stages, peculiarities, instruments, and technique of splitting the bone crest with simultaneous installation of dental implants.
54. Indications and methods for guided bone regeneration.
55. Principles and types of incisions used in oral implantology.
56. Anatomical peculiarities of the maxillary sinus. The role of the maxillary sinus in oral implantology.
57. The phenomenon of maxillary sinus pneumatization. Classification of sinus septa.
58. Classification of residual subantral bone height (SA classification according to Misch).
59. Indications and contraindications for maxillary sinus floor elevation (sinus lifting).
60. Elevation of the maxillary sinus floor through a crestal approach. Indications and contraindications.
61. Surgical technique for elevating the maxillary sinus floor through a crestal approach.
62. Advantages of crestal sinus lifting.
63. Disadvantages of crestal sinus lifting.
64. Intra- and postoperative complications and accidents of crestal sinus lifting.
65. Surgical kit and necessary instruments for crestal sinus lifting.
66. Surgical technique for elevating the floor of the maxillary sinus through lateral access (lateral sinus lifting).
67. Lateral Sinus lifting technique with immediate implant insertion.
68. Lateral Sinus lifting technique with delayed implant insertion.
69. Requirements and types of flaps used in lateral sinus lifting.
70. Indications for elevating the floor of the maxillary sinus through lateral access.
71. Contraindications for elevating the floor of the maxillary sinus through lateral access.
72. Advantages of elevating the floor of the maxillary sinus through lateral access.
73. Disadvantages of elevating the floor of the maxillary sinus through lateral access.
74. Instruments and devices used for elevating the floor of the maxillary sinus through lateral access.
75. Intraoperative accidents that can occur in sinus lifting interventions.
76. Intra- and postoperative complications in sinus-lifting interventions.
77. Accidents and possible complications during dental implant insertion.
78. Possible complications during the healing period (implant failure, peri-implantitis, wound dehiscence, and mucosal dehiscence).
79. Classification of mucosal dehiscence (according to H.Tal).
80. Accidents and possible complications after the integration period of the implants.
81. Late complications in implant-prosthetic rehabilitation.
82. Biological accidents and complications in implant-prosthetic rehabilitation.
83. Mechanical complications in implant-prosthetic rehabilitation.
84. Injury to the inferior alveolar neurovascular bundle. Neuropraxia, axonotmesis, neurotmesis.
85. Accidents and complications that can occur during post-extraction (type 1) implant installation.
86. Repositioning of the inferior alveolar neurovascular bundle.
87. Alternative methods for implant installation: All-on-six/four. Indications.
88. Advantages and disadvantages of the alternative All-on-six/four implant installation methods.