

## **Preclinical dentistry questions I. – operative dentistry, theory**

1. Morphology of permanent dentition – frontal teeth
2. Morphology of permanent dentition – lateral teeth
3. Deciduous dentition – characteristics and description
4. Morphological nomenclature in oral cavity and denotation of teeth
5. The physiological function of dentition and oral cavity
6. Development of dentition, teeth eruption
7. Enamel, dentin and cementum – composition and characterization. Periodontium.
8. Equipment of the dental office, device, materials – an overview.
9. Motors and handpieces.
10. Investigative instruments, filling and preparation instruments, matrices and wedges.
11. Periodontic instruments
12. Endodontic instruments
13. Temporary filling materials
14. Permanent filling materials, amalgam
15. Composites and glassionomers
16. Medicaments and materials in endodontics
17. Understanding dental caries (caries danger areas, classification of dental caries)
18. Therapy and treatment of dental caries, prevention and prophylaxis
19. Parodontopathies – aethiology, classification.
20. Oral hygiene – home and professional care
21. Classification of cavities, basic rules for preparation
22. Class I. cavity – characterization, preparation, filling materials, making fillings – sequence of operation.
23. Class I. cavity – characterization, preparation, filling materials, making fillings – sequence of operation.
24. Class II. cavity – characterization, preparation, filling materials, making fillings – sequence of operation.
25. Class III. cavity – characterization, preparation, filling materials, making fillings – sequence of operation.
26. Class IV. cavity – characterization, preparation, filling materials, making fillings – sequence of operation.
27. Class V. cavity – characterization, preparation, filling materials, making fillings – sequence of operation.
28. Protection of dentin wound, indirect and direct pulp capping, bases and liners.
29. Morphology of pulp chamber and root canals including description of terms: apical constriction, apical foramen, apex. Working length.
30. Techniques and methods of root canal shaping.
31. Root canal filling, techniques, materials.

## **Preclinical dentistry I. – operative dentistry, practice.**

### **Part A. Preparation**

1. Class II. cavity preparation (MO) in mandibular premolar (base, amalgam filling).
2. Class II. Cavity preparation (MOD) in mandibular premolar (base, amalgam filling).
3. Class II. Cavity preparation MO in mandibular molar (base, amalgam filling).
4. Class II.(MOD) in mandibular molar (base, amalgam filling).
5. Class II.(OD) in mandibular molar (base, amalgam filling).
6. Class V. cavity preparation for composit, filling, discussion of matrices and other filling materials.
7. Class I. Cavity preparation, base, amalgam filling, discussion od other materials.
8. Class III. for composites, filling
9. Class IV. – preparation and filling

### **Part B. Endodontics.**

1. Opening of the pulp chamber.
2. Reaming action.
3. Canal shaping using circumferential filing.
4. Canal shaping using balanced force technique.

### **Part C. Tooth identification**

All students bring for this part of the exam 1 premolar and 1 molar, endodontic instruments and 1 non used clear resin block. Without these student will not be admitted to the exam.

## **Preclinical dentistry II, questions - prosthetic – theory**

1. Defects of dentition – the classification acc. to Voldřich
2. Classification of dentures, principles of their fabrication (direct and indirect method)
3. Preparation instruments for prosthetic procedures. Diamonds, discs. Principles of their use. Handpieces.
4. Impression techniques –instruments and tools
5. Models(casts), kinds, instruments and tools.
6. Prosthetic materials
7. Alginate impression materials, composition, mode of employment, pouring and Indications of the alginate impression.
8. Silicone impression materials. Kinds, modes of employment, indications of the impression.
- Other elastomers.
9. Zinkoxideugenol impression materials.
10. Gypsum
11. Investment materials.
12. Waxes. Materials for grinding and polishing
13. Precious and non precious dental alloys.
14. Laboratory fabrication of metal alloys.
15. Methylmetacrylates, kinds, manner of fabrication.
16. Ceramics.
17. Principles of teeth preparation, round and sharp shoulder.
18. Impression techniques for crowns and bridges.
19. Impression techniques for removable partial denture.
20. Impression technique for complete denture.
21. Complete denture, sequence of operations.
22. Jacket crowns, sequence of operations.
23. Full metal crown, facette crown, sequence of operations.
24. Fixed bridges, description of their parts, materials, indications, sequence of operations.
25. Removable partial dentures with metal framework, their components, clasps, attachments, hybrid dentures.
26. Orthodontic anomalies, their classification, classification acc. to Angle.
27. Principles of orthodontic therapy. Prevention in orthodontic

## **Preclinical dentistry, question II. - prosthetic practice**

### **Part A. preparation**

1. Preparation for full metal crown in premolar, description of the impression technique
2. Preparation for facette crown in premolar, description of the impression technique
3. Preparation for metalceramic crown, description of the impression technique
4. Preparation for jacket crown, description of the impression technique

### **Part B. description**

1. Removable denture class I. sequence of operation
2. Removable denture class II. sequence of operation
3. Removable denture class III. sequence of operation
4. Complete denture, sequence of operation.

**Students have to bring 1 premolar and 1 molar for the practical part of this part of the exam. Without teeth they will be not admitted to the exam.**

## **Preclinical dentistry III. questions - oral surgery - theory**

1. Sterilisation with saturated water steam.  
Principles of X-ray examination, risks and prevention.

2. Dry - heat sterilisation

Local anaesthesia in oral surgery.

3. Desinfection – principles and chemicals

Indications of the x-ray examination in oral surgery.

4. Basic surgical instruments, principles of their use

Cold sterilisation.

5. Preparation for a surgical treatment in dentistry

Principles of asepsis, surgical hand washing.

6. Nerve blocked anaesthesia – foramen mandibulae.

Structures and anatomical figures in x-ray picture in lower jaw

7. Infiltration anaesthesia

Structures and anatomical figures in x-ray picture in lower jaw

8. Elevators – description and use

Intraoral x-ray pictures, principles of investigation (techniques – parallel technique, technique of halving angle)

9. Suture materials

Basic x-ray techniques of skull and jaws.

10. Teeth extractions using forceps. Principles

Blocked nerve anaesthesia in upper jaw.

11. Terms of surgical operations. Extraction, apicectomy, hemiextraction, excochleation, sutura.

Complications of extraction and local anaesthesia.

12. Principles of teeth extractions – work with the elevators

Processing of x-ray pictures, principle of digital radiography

### **Preclinical dentistry III., questions - oral surgery - practice**

1. Nerve blocked anaesthesia on tuber maxillae and foramen infraorbitale – demonstration of the technique

2. Extraction of maxillary molars - demonstration of the technique

3. Nerve blocked anaesthesia on foramen mandibulae – demonstration of the technique

4. Extraction of mandibular molars - demonstration of the technique
5. Infiltration anaesthesia – demonstration of the technique
6. Extraction of maxillary incisors and canines - demonstration of the technique
7. Techniques of sutures demonstration of the technique single suture, mattress suture and cross mattress suture.
8. Extraction of mandibular incisors - demonstration of the technique
9. Identification of surgical instruments – techniques of use. (forceps and elevators)
10. Identification of surgical instruments – techniques of use. (others)