

Database of questions for the Medical-Dental Final Examination (LDEK)

Part 2

Prosthodontics

Modified 18.12.2023

- In order to create conditions for adhesion and mechanical blocking of ceramics on the surface of restoration built with metal alloy, one may use:
 - abrasive blasting with aluminium oxide.
 - sand-blasting with aluminium dioxide.
 - hydrofluoric acid etching.
 - metal coping is subject to sintering.
 - coping surface is layered with Sur A Link.
- In order to ensure permanent connection of metal-ceramics alloy, the most advantageous situation occurs when:
 - during cooling process, the alloy is shrinking slightly more than ceramics.
 - thermal expansion index of metal coping is higher by $0.5 \times 10^{-6}/^{\circ}\text{C}$.
 - both materials possess similar thermal expansion index values.
 - ceramics is induced by permanent compressive stress – residual compression.
 - all of the above-mentioned are true.
- What ceramics is used for fabrication of posts, veneers, crowns and bridges:
 - high-melt.
 - medium-melt.
 - low-melt.
 - feldspathic.
 - melting temperature of below 870°C .
- Methods of mechanic surface unfolding combining metal to veneering material in adhesive bridges with metal coping **do not** include:
 - macroretention in the form of pearls.
 - microretention in the form of wire mesh.
 - positive-negative method for washing out the salt crystals.
 - abrasive blasting with sandblaster and aluminium oxide of $50 \mu\text{m}$ diameter.
 - tin-coating.
- Indicate **false** statements regarding fabrication of cantilever bridges:
 - artificial lateral incisor against canine.
 - artificial first premolar against blocked first molar and second premolar.
 - artificial first lower molar against blocked first and second premolar.
 - artificial first molar against second premolar in lower arch.
 - all of the above-mentioned are true.

6. Indicate **false** statements regarding offloaded pontic:
- A. straightforward course.
 - B. it possesses tubercles of low activity.
 - C. it possesses increased vestibulo-lingual dimension.
 - D. it contraindicates the distortion of large constructions.
 - E. it is supposed to prevent bending of prosthetic construction.
7. TWI index according to Smith is designed to:
- A. estimate the thickness of dental plaque on removable prostheses.
 - B. staining the dental plaque on the surface of removable prostheses with spraying the right liquid.
 - C. assessing the bleeding from gingival pocket with diagnosed periimplantitis.
 - D. assessing the stage of inflammation if marginal periodontal tissue.
 - E. assessing the depth of lesions in case of pathologic wear.
8. Indicate true statements regarding polyether impression material:
- A. they contain solvent, which unfortunately shortens the working time.
 - B. until the moment of pouring the cast, they should be stored in wet environment.
 - C. they are not recommended for implant prosthesis.
 - D. in comparison to other impression materials, they are characterized by absence of temperature increase during binding.
 - E. they possess strong hydrophilic abilities.
9. Modelling the framework with elements of wax techniques is performed on working model obtained from:
- A. model cast.
 - B. hard cast.
 - C. alabaster cast.
 - D. refractory die.
 - E. agar impression material.
10. Preparing the cast model according to Reinchenbach technique, during fabricating the immediate prosthesis, consists in cutting the teeth up to necks and:
- A. removing a layer of cast from vestibular side.
 - B. performing a depression with a cutter up to the depth of 1 to 3 mm and smoothing the margins.
 - C. removing a layer of cast from palatal or lingual side.
 - D. performing a depression with a cutter up to the depth of 1 to 3 mm and removing a layer of cast from vestibular side.
 - E. performing a depression with a cutter up to the depth of 1 to 3 mm and removing a layer of cast from palatal or lingual side.
11. Indicate the most effective method of treatment of prosthetic stomatopathy:
- A. pharmacologic.
 - B. periodontal.
 - C. pharmaco-prosthetic.
 - D. prosthetic.
 - E. pharmaco-surgical.

- 12.** Using Face bow during prosthetic restorations fabrication is to determine:
- A.** height of central occlusal position of the mandible.
 - B.** vertical dimension of lower face height and transferring the data to the articulator.
 - C.** relation of occlusal plane of upper arch to the hinge axis of TMJs and transferring the data to the articulator.
 - D.** Camper's plane in relation to the hinge axis of TMJs.
 - E.** Frankfurt plane in relation to the hinge axis of TMJs and transferring the data to the articulator.
- 13.** Introductory surface is a part of which surface:
- A.** lower angular.
 - B.** retention.
 - C.** Intermediate.
 - D.** classic guiding.
 - E.** passive guiding.
- 14.** Indicate true statement regarding relaxation splints used in the rehabilitation of motor system of masticatory system:
- A.** they possess flat occlusal surface.
 - B.** they possess modelled occlusal surface.
 - C.** they are used in therapeutic mandible position.
 - D.** in repositional.
 - E.** they are called Wloch's splints.
- 15.** Thanks to galvanofforming technique homogenous coping of which thickness can be achieved:
- A.** 0.1 mm.
 - B.** 0.2 mm.
 - C.** 0.3 mm.
 - D.** 0.4 mm.
 - E.** 0.5 mm.
- 16.** Too large amount of liquid used in acrylate during polymerization may cause:
- A.** porosity of surface.
 - B.** gas porosity.
 - C.** acrylate deformation.
 - D.** heightening of the occlusion.
 - E.** significant polymerization shrinkage.
- 17.** Indicate proper order of the adaptation phases towards prostheses:
- A.** irritation, suppression, incorporation.
 - B.** irritation, incorporation, full adaptation.
 - C.** incorporation, irritation, suppression, full adaptation.
 - D.** incorporation, irritation, suppression.
 - E.** irritation, incorporation, suppression.

18. In the course of treatment of patients with pathologic wear, during wax-up, it is essential to reconstruct the teeth shape following the principles of esthetics and anatomy:

- 1) relation of width to height of mandibular lateral incisors is around 0.72;
- 2) mean width of maxillary canine is 7.5 mm;
- 3) mean height of central maxillary incisor is 12 mm;
- 4) proportion of width to height of central maxillary incisors' is around 80%;
- 5) mean height if latera incisor is around 6.5 mm.

Correct answer is:

- A.** 1,3. **B.** 2,4. **C.** 1,2,4. **D.** 1,3,5. **E.** 1,5.

19. Properly prepared tooth 36 for ceramic overlay requires:

- 1) cutting the buccal cusp by around 1.5 to 2mm;
- 2) cutting the lingual cusp by 1mm;
- 3) finishing the cusps falling within preparation with radial shoulder of 1.5mm width;
- 4) divergent preparation of the axis walls at an 18° angle;
- 5) preparation of cavities located on proximal surfaces in the cuboid shape;
- 6) minimum width of the cavity of occlusal surface should be 2/3rd of the intercuspall width.

Correct answer is:

- A.** 1,2,5. **B.** only 1. **C.** 1,3,6. **D.** only 2. **E.** all of the above mentioned.

20. The dentist planned fabrication of temporary crowns for damaged teeth, with an indirect method, with the use of silicone index. For this purpose:

- 1) before preparation diagnostic impressions, occlusion and facial bow registration was made and then sent to the lab;
- 2) before the preparation, silicone index in the patient's mouth was made;
- 3) before the preparation, silicone index on diagnostic model was made;
- 4) he ordered for diagnostic waxing of future restoration on cast model, taking into consideration the esthetics and functionality;
- 5) silicone index was made on the wax-up model;
- 6) silicone index was filled with bis-GMA based die and introduced into the oral cavity;
- 7) silicone index was filled with polycarbonate die and introduced to the diagnostic model.

Correct answer is:

- A.** 1,2,6. **B.** 1,3,4,5,7. **C.** 1,4,5,6. **D.** 2,4,5,6. **E.** 2,3,4,5,7.

- 21.** During checking the complete prostheses, the dentist found lack of contacts in the left lateral part (underbite). Occlusion height is correct. Occlusal plane in the upper prosthesis is also correct. In such situation it is advised to:
- 1) return the prosthetic work to the lab with comments, ask for switching of the teeth and finishing the prostheses;
 - 2) return the prosthetic work to the lab with comments and ask for new occlusal rims;
 - 3) fabricate new lower occlusal rim during the same visit, establish and register the occlusion;
 - 4) remove the teeth from the lower prosthesis in the underbite location during the same visit, fabricate and plasticize occlusal shaft and register the occlusion;
 - 5) register the occlusion during the same visit using wax or silicone register, using mock dentures.

Correct answer is:

- A.** 1,2. **B.** only 3. **C.** only 4. **D.** only 5. **E.** 4,5.

22. Indicate correct statements:

- 1) kinematic face bow is based on conventional hinge axis of TMJs, located in external acoustic apertures;
- 2) axis of condyle rotation is and hinge axis estimated with arbitrary face bow is the same concept;
- 3) axis of condyle rotation in arbitrary face bow is along the line of lateral eye angle-auricular tragus, 13 mm anteriorly and 5 mm downward from the border of ear tragus;
- 4) axis of condyle rotation in arbitrary face bow is along the naso-auricular line, 13 mm anteriorly and 5 mm downward from auricular tragus;
- 5) axis of condyle rotation in kinematic face bow is along the tragion-orbitale line, 13 mm anteriorly and 3 mm downward from external acoustic apertures.

Correct answer is:

- A.** 1,4. **B.** 1,3. **C.** 1,2. **D.** only 3. **E.** only 5.

23. Indicate true statements regarding hybrid ceramics:

- 1) modulus of elasticity 35-37 GPa, higher than the laboratory composites;
- 2) bending strength similar to silicate ceramics;
- 3) HV hardness higher than enamel;
- 4) it is subject to lower wear than the composites;
- 5) it is subject to HF etching.

Correct answer is:

- A.** 1,2,3. **B.** 1,4,5. **C.** 1,2,4. **D.** 1,2,4,5. **E.** all of the above mentioned.

24. Indicate true statements regarding casting technique during fabrication of complex crowns on metal coping:

- 1) pouring the cast from class IV plaster;
- 2) replication of cast with refractory die;
- 3) preparation of the abutment in the cast;
- 4) isolation by covering the abutment with varnish;
- 5) modeling the wax crown on plaster cast;
- 6) modeling the crown on replicated cast;
- 7) mounting the wax templates together with casting canals on the top of soldering cone;
- 8) sinking the cast together with wax crown in refractory die in soldering ring with casting canals and the soldering cone;
- 9) changing the wax to metal using the shuttering wax method;
- 10) fabricating the metal coping.

Correct answer is:

- A.** 1,2,3,4,6,7,8,9. **B.** 1,2,3,6,8,9,10. **C.** 1,3,4,5,7,8,10.
D. 1,3,4,5,9,10. **E.** 2,3,4,5,6,8,9,10.

25. Indicate true statements regarding fabrication of bridges on zirconium dioxide ceramics coping:

- 1) zirconium oxide ceramics is casted and veneered with fluorapatites ceramics;
- 2) bridge pontic connectors should be of minimum dimension of 6 mm² in anterior section;
- 3) bridge pontic connectors should be of minimum dimension of 12 mm² in posterior section;
- 4) abutment preparation should ensure minimum space of 0,4 mm in anterior section for coping;
- 5) preparation depth of functional cusps of abutment teeth should be of 1.5 mm.

Correct answer is:

- A.** 1,3,5. **B.** 1,2,3. **C.** 3,4. **D.** 2,3,4. **E.** 1,2,4,5.

26. Indicate true statements regarding preparation of tooth for individual post and cores:

- 1) length of future core should be around 3/4 of root length;
- 2) length of the core should be at least of the length future crown;
- 3) width of canal prepared for core should be at maximum of 1/2 root width;
- 4) it is essential to leave at least 2mm dentin around the core;
- 5) canal should be cone shaped with degree of convergence not higher than 3 degrees.

Correct answer is:

- A.** 1,2. **B.** 2,3. **C.** only 2. **D.** 2,5. **E.** all of the above-mentioned.

27. In half direct method of composite cores preparation:

- 1) we perform negative of prosthetic field and send its impression to the lab;
- 2) we perform negative of prosthetic field and subsequently its positive with second elastic impression material;
- 3) we perform negative of prosthetic field and cast the model in the dental office;
- 4) we model the core directly in the oral cavity;
- 5) we model the core on the positive of prosthetic field fabricated from elastic impression mass or plaster during the same visit.

Correct answer is:

A. only 1. **B.** only 4. **C.** 2,3. **D.** only 5. **E.** 2,3,5.

28. Lateral bridges on zirconium dioxide coping require:

- 1) "light chamfer" margin from lingual side and "heavy chamfer" from vestibular side;
- 2) core made from zirconium oxide of 0.3mm width;
- 3) bridge pontic connectors with crowns of minimum dimension of 12 mm² in lateral section;
- 4) margin preparation of 1mm from the veneered side;
- 5) preparation of occlusal surface of 1 to 1.5 mm.

Correct answer is:

A. 1,4. **B.** 3,4. **C.** 1,2,4. **D.** 2,3,4. **E.** 2,4,5.

29. Patient has lost tooth 11. Temporary bridge 12-21 can be fabricated with following methods:

- 1) using prefabricated polycarbonate matrices;
- 2) using prefabricated cellulose matrices;
- 3) using individual thermoplastic matrices;
- 4) direct method from the impression;
- 5) direct method with the use of silicone index from wax up;
- 6) indirect method.

Correct answer is:

A. 4,5,6. **B.** 2,4,6. **C.** 3,5,6. **D.** 1,5,6. **E.** 3,5.

30. If mutual inclination of abutments exceeds 25 grades, the element connecting the pontic with abutment may be:

- 1) partial crown fabricated from leucite ceramics;
- 2) core in onlays;
- 3) external attachments;
- 4) complete metal-ceramics crown;
- 5) metal crown on post and core.

Correct answer is:

A. 2,3,4. **B.** 1,2,3. **C.** 2,3,5. **D.** 1,3,6. **E.** 2,4,5.

31. Indicate true statements regarding pontic of modified overlay:

- A.** they are used in anterior section.
- B.** gingival surface of pontic has the shape consistent with ridge configuration and lingual side of alveolar process.
- C.** vestibular part of pontic is shaped according to protuberance of adjacent teeth.
- D.** lingual surface is concave.
- E.** gingival surface is distanced from the gingiva by 2 mm.

32. Parallelometer analysis aims to:

- 1) establishing the path of insertion of denture, at which optimum guiding surfaces are present;
- 2) establishing the path of insertion consistent with bisector of angles between the long axis of teeth;
- 3) finding the path of insertion, at which clasp surfaces will be the best;
- 4) finding the path of insertion, at which supporting area of denture will be optimum;
- 5) finding the path of insertion, at which denture will best fulfil its function and the same time the denture bearing area will be restricted to minimum.

Correct answer is:

- A.** 1,3,5. **B.** only 2. **C.** 3,4,5. **D.** only 5. **E.** 3,5.

33. In a working model before replication, following surfaces are blocked:

- 1) undercuts on teeth surfaces, which have been used for placing introductory arms;
- 2) on alveolar processes, places covered with acrylic are blocked;
- 3) classic guiding surfaces;
- 4) indirect surfaces;
- 5) fragments of retention surfaces under clasps arms;
- 6) ridge undercuts;
- 7) interdental spaces of teeth that are not abutments.

Correct answer is:

- A.** 1,5,6,7. **B.** 2,5,6,7. **C.** 2,4,7. **D.** 5,7. **E.** 3,4,5.

34. In designing modified connector of cast removable upper denture, the dentist should proceed according the following principles:

- 1) denture base should be distanced from the gingival margin by 6mm;
- 2) denture base should be distanced by gap from gingival margin;
- 3) denture base should be in contact with teeth;
- 4) denture base should be designed in the glandular zone of the palate;
- 5) denture base should not be designed in the area of palatal plicae.

Correct answer is:

- A.** 3,4. **B.** 1,5. **C.** 1,4. **D.** 2,5. **E.** 3,5.

- 35.** Optimally, sublingual arch in cast removable lower denture should be situated:
- A.** in the distance of 2mm from the alveolar process with undercuts.
 - B.** at least 3 to 4 mm from gingival margin.
 - C.** at least 5 mm from the oral cavity floor.
 - D.** it should be at least 2 mm high.
 - E.** the distance from oral cavity floor should be at least 10 mm minimum, for the placement of sublingual strap.

36. Indicate true statements regarding the retention arm of clasp in cast removable denture:

- 1) it is found on the retention surface;
- 2) it is found on the lower angular surface in relation to the guiding;
- 3) it may cooperate with actively guiding arm, located on the tooth on the other side of the arch, on opposite surface;
- 4) it occupies the entire breadth of the tooth;
- 5) it may cooperate with classic guiding arm, located on the tooth on the opposite side of the tooth gap.

Correct answer is:

- A.** 1,2,5. **B.** 2,3. **C.** 1,3,4. **D.** 1,2,4,5. **E.** 1,2,3,4.

37. Indicate true statements regarding the resting position of the mandible:

- 1) the mandible is positioned in the relaxed occlusion, adopted instinctively, and its middle is compatible with the medial body line;
- 2) protruding and retruding muscles, protruding and retruding the mandible are in balance;
- 3) it occurs as the result of bilateral equally minimal muscle spasm of muscles protruding and retruding the mandible;
- 4) heads of mandible in the joints are positioned symmetrically with slight shift towards the bottom and front from the central position;
- 5) joint heads are positioned symmetrically, in the most posterior position in articular surface;
- 6) teeth of lower and upper arch achieve first contacts in the area of their slopes;
- 7) in normal, physiological conditions multipoint contact of opposite teeth occurs;
- 8) at preserved occlusal height between the dental arches small space is observed.

Correct answer is:

- A.** 1,2,7. **B.** 1,3,8. **C.** 5,6. **D.** 2,4,8. **E.** 1,4,7.

38. Patient has problems with the pronunciation of vowel sounds b and p. Such situation may be connected with:

- A.** too high occlusion of denture.
- B.** too short anterior teeth in upper denture.
- C.** incisors alignment with diastema.
- D.** thick denture base.
- E.** too narrowly aligned premolars in upper denture.

39. In order to register the mandible movement in projection to horizontal plane, one may use:

- 1) intraoral wax registers;
- 2) plate with stylus drawing the so-called gothic arch;
- 3) occlusal rims;
- 4) graphic method of intraoral registration;
- 5) electric recorder Zebris.

Correct answer is:

- A.** 1,3. **B.** 2,4,5. **C.** 1,2,4. **D.** 2,3,5. **E.** 1,3,4,5.

40. Indicate the causes of prosthetic stomatopathy:

- 1) weakening of the defensive processes of oral cavity mucosa;
- 2) impaired saliva secretion;
- 3) elevated level of blood and salivary glucose;
- 4) inadequate denture hygiene.

Correct answer is:

- A.** 1,2. **B.** 2,3,4. **C.** 3,4. **D.** 1,3. **E.** all of the above mentioned.

41. Patient using complete dentures for 7 years reported with burning sensation of oral cavity mucosa. Clinical examination revealed prosthetic stomatopathy complicated with fungal infection and absence of denture stability. Treatment of choice would be:

- A.** immediate fabrication of new dentures.
- B.** immediate fabrication of new dentures and administration of local antifungal treatment utilizing said dentures.
- C.** administration of antifungal treatment utilizing old dentures and after period of 2 weeks, fabrication of new dentures.
- D.** administration of systemic antifungal treatment.
- E.** relining of old dentures with "tissue conditioner" material.

42. Indicate true statements regarding centric occlusion:

- A.** there may be compatibility between posterior occlusal position of the mandible and maximum intercuspating of teeth.
- B.** slide between posterior occlusal position of the mandible and maximum intercuspating should occur without occlusal obstacles and bilateral contact of all lateral teeth.
- C.** maximum intercuspating of teeth should be located on the medial plane which corresponds to the central mandible position.
- D.** in posterior occlusal position and during medial mandibular slide, contacts of anterior teeth do not occur.
- E.** all of the above-mentioned answers are true.

43. Fundamental and most effective hygienic procedure of used removable dentures is/are:
- A. cleaning tablets.
 - B. regular and thorough surface cleaning with a brush.
 - C. disinfection of dentures with a solution containing antiseptic.
 - D. disinfection of dentures with a solution containing antifungal medicine.
 - E. rinsing of the dentures after each meal.
44. Indicate true statements regarding the curve of Spee:
- 1) it connects the apexes of buccal cusps of premolar and molar;
 - 2) it runs in the sagittal plane;
 - 3) it links homonymous lateral teeth on each side;
 - 4) it runs in the frontal plane.
- Correct answer is:
- A. 1,2. B. 1,3. C. 2,3. D. 1,4. E. all of the above-mentioned.
45. Individual trays used in fabrication of removable dentures **are not** made from:
- A. acrylic.
 - B. light cured materials.
 - C. metal.
 - D. shellac.
 - E. thermoplastic materials shaped by hand or in special devices such as Erkopress or Erkoform.
46. According to Supple's classification, indicate the type, in which atrophied alveolar processes are layered with thin, not susceptible mucosa, which prevents from establishing good retention and denture stabilization:
- A. I.
 - B. II.
 - C. III.
 - D. IV.
 - E. II and IV.
47. Extensive dentures are fabricated based on which impressions:
- A. anatomical.
 - B. mucostatic.
 - C. orientation.
 - D. mucodynamic.
 - E. selectively relieving.
48. In order for shaping the impression material during functional impression on individual tray from the lingual side in the section from canine to second premolar, we ask the patient to:
- A. open the mouth wide.
 - B. lick upper and lower lip.
 - C. touch the buccal mucosa with the tongue.
 - D. protrude the tongue above the upper lip.
 - E. arranging the lips as in during whistling.

49. Indicate the abilities, which should be possessed by occlusal rims:
- A. the range should not exceed the prosthetic field.
 - B. occlusal shafts should be located on the peaks of alveolar processes.
 - C. they should be fabricated with hard to bend material in the oral cavity environment, with wax type II.
 - D. width of occlusal shafts should be around 10 mm, height – 20 to 22 mm in case of upper shaft and 16 in case of the lower one.
 - E. all of the above-mentioned answers are true.
50. Indicate true statement regarding the ala-tragus line, which is used in clinical procedures during complete dentures fabrication:
- A. indicative line determined extra orally, also known as the Camper line, it runs between lower margin of nasal ala and lower auricular tragus.
 - B. the plane connecting anthropometric osseous points spina nasalis anterior and porion.
 - C. it is indicated by anthropometric osseous points porion and orbitale.
 - D. line connecting the centers of pupils in a patient looking into the distance.
 - E. line running 2cm below the lower margin of upper lip.
51. Active methods of central occlusion registration in edentulous patients include:
- A. swallowing method – swallowing of the saliva and closing the mandible at the end of the activity.
 - B. multiple repetition of closing and opening the mouth.
 - C. touching the posterior margin of the upper rim's base with the tip of the tongue.
 - D. adduction of the mandible, when the head is bent backwards.
 - E. all of the above-mentioned answers are true.
52. What should not be recommended to a patient after introducing complete dentures:
- A. cleaning the dentures after every meal under the stream of warm water.
 - B. changing the dentures every 3 to 5 years.
 - C. storing the dentures in water during night's sleep.
 - D. in case of damage, one should report to the dentist.
 - E. performing hygienic procedures at least 2 times a day with a special brush and paste or soap.
53. Indicate correct statements regarding electrolytic polishing:
- A. it is also known as cathode polishing.
 - B. it is effective against irregularities of 15 to 30 μm .
 - C. it allows for dissolving the metal in places, where the amperage is highest, which means on the elevation of the irregularity.
 - D. it works also in depressions of coarse denture surface.
 - E. it does not require mechanical pre-treatment.
54. Indicate **false** statements regarding materials for biological tissue regeneration:
- A. they may be used in the treatment of prosthetic stomatopathies.
 - B. they may be used for short time only.
 - C. they often cause allergic reaction of oral mucosa.
 - D. they may be used accompanied by antifungal drug.
 - E. in the course of treatment, it is required to carefully adhere to hygiene procedures routine by the patient.

55. Choice of connector in cast removable denture is dependent on:

- 1) alignment of residual dentition;
- 2) esthetic conditions;
- 3) prognostic assessment of the dentition;
- 4) number of abutment teeth;
- 5) embedding of teeth in the alveolus.

Correct answer is:

A. 1,2. **B.** 1,2,4. **C.** 3,5. **D.** 1,3,4. **E.** all of the above-mentioned.

56. The goal color of ceramic crown is influenced by:

- 1) abutment tooth;
- 2) ceramic material used;
- 3) ceramic coping;
- 4) cement for restoration placement
- 5) post and core.

Correct answer is:

A. 1,2,3. **B.** 3,4. **C.** only 2. **D.** 1,4,5. **E.** all of the above-mentioned.

57. Indicate true statements regarding small connectors in cast removable denture:

- 1) they emerge from large connector and connect other elements of denture;
- 2) they convey vertical, horizontal and rotational load between the abutment teeth and rest area in edentulous sections;
- 3) they are used most often for connecting occlusal rest with large connector;
- 4) they must be elastic;
- 5) they adhere to the teeth on upper angular surfaces.

Correct answer is:

A. 1,2. **B.** 2,3. **C.** 1,4. **D.** 1,2,3,5. **E.** all of the above-mentioned.

58. Indicate conditions necessary for fabrication of bridges veneered with porcelain:

- 1) sufficient number of abutments, their favorable placement, appropriate fixation of abutments in the alveoluses;
- 2) absence of periodontitis, parallel roots, proper anatomical shape of the abutments;
- 3) absence of parafunctions, parallel long axis of clinical crowns;
- 4) parallel long axis of clinical crowns and roots and sufficient number of abutments;
- 5) aligned occlusal surface.

Correct answer is:

A. only 1. **B.** 1,2,3. **C.** 2,4. **D.** 1,3,5. **E.** 1,5.

59. Preferred alveolar shape of span of a porcelain veneered bridge 13-23 is span:

- A.** hygienic.
- B.** ridge lap.
- C.** modified ridge lap.
- D.** in contact with oral mucosa and polished by the lab technician.
- E.** heart-shaped.

- 60.** Choose true statements preparing the dentin for a veneered crown:
- A.** the masticatory surface should be prepared with the fissure and cups system intact.
 - B.** efforts should be made to maintain round cross section of prepared tooth.
 - C.** the direction of prepared medial walls must be consistent with long axis of the tooth.
 - D.** preparing the tooth in the shape of cone greatly enhances the crown retention.
 - E.** palatal surface is prepared for the depth of around 1.5 mm.
- 61.** Clinical examination revealed unbounded edentulous areas including molars and premolars in both arched and pathologic wear in anterior mandibular section up to 1/3rd height of the crowns. There are no symptoms of dysfunction from the masticatory system. In such situation you would fabricate:
- A.** partial dentures in habitual occlusion.
 - B.** dentures in constructive occlusion, restoration of wearied teeth.
 - C.** MRI of TMJs before commencing the treatment.
 - D.** repositioning occlusal splint.
 - E.** muscle deprogramming.
- 62.** On which stage can the first parallelometer analysis may be performed:
- A.** designing prosthetic treatment.
 - B.** designing metal part of cast removable denture.
 - C.** introducing metal part of the denture to the denture bearing area.
 - D.** finding optimal introductory tract.
 - E.** assessment of the prosthetic field range.
- 63.** Indication for the parallelometer analysis is planning:
- 1) complete dentures;
 - 2) fixed restoration on patient's own teeth;
 - 3) removable restorations on implants;
 - 4) cast removable dentures;
 - 5) partial mucosa-supported denture.
- Correct answer is:
- A.** only 4. **B.** 2,3,4. **C.** 1,2,3. **D.** 4,5. **E.** all of the above-mentioned.
- 64.** Control of partial mucosa-supported dentures on the model includes an assessment:
- 1) height of occlusion;
 - 2) smile esthetic;
 - 3) occlusion;
 - 4) retention of denture base;
 - 5) teeth alignment.
- Correct answer is:
- A.** only 5. **B.** 1,3,5. **C.** 3,5. **D.** 1,4,5. **E.** only 3.

- 65.** After teeth extraction and introduction of immediate dentures, patient should receive following instructions:
- A.** after each meal, the denture should be removed and thoroughly cleaned.
 - B.** first follow-up visit should be on the second day.
 - C.** follow-up visit should be after 2 to 3 days.
 - D.** in case of experiencing pain, analgesic gel should be applied.
 - E.** the denture should be disinfected in 3% hydrogen peroxide during the night.
- 66.** Indicate management of diagnosed prosthetic stomatopathy type I:
- A.** elimination of mechanic injury connected with denture use, ordering proper hygiene of oral cavity and prosthetic restorations.
 - B.** mycologic diagnostics and administration of targeted antibiotic therapy.
 - C.** removal of hyperplastic mucosa of oral cavity using laser.
 - D.** administering antibiotic therapy and anti-inflammatory drugs.
 - E.** after one week of antibiotic therapy, the lesions should be removed.
- 67.** Among elements of examination used for estimation of the range of plaster model preparation before fabricating the immediate denture, the most useful are:
- 1) measurement of gingival pockets depth;
 - 2) static occlusion examination;
 - 3) tooth mobility estimation;
 - 4) radiologic examination;
 - 5) assessment of antagonistic dentition.

Correct answer is:

- A.** 1,2. **B.** 1,2,3. **C.** 1,3,4. **D.** 1,3,5. **E.** 3,4.

- 68.** Indicate true statements regarding overdentures:
- A.** in tough anatomic conditions in mandible, it is possible to execute overdenture supported by single implant in medial line.
 - B.** matrix exchange in overdenture must always be performed in the lab.
 - C.** splint bars ensure least retention force of denture among all retentive elements.
 - D.** using properly endodontically treated residual roots for fabrication of two retentive latches in mandible increases bone atrophy.
 - E.** they cannot be used on intraosseous implants.

- 69.** Assessment of tooth in regard to bridge fabrication, one must take into consideration:
- 1) alveolus stability;
 - 2) periapical tissue state;
 - 3) length of coronal part of abutments;
 - 4) extent of teeth loos;
 - 5) course of occlusal plane.

Correct answer is:

- A.** 1,2. **B.** 1,2,4. **C.** 2,3,4. **D.** 1,3,5. **E.** all of the above-mentioned.

70. 20-year-old female patient reported due to pain of the TMJs areas and increased facial muscle tension. Ailments appear periodically, during intensified stress at the university. Clinical examination revealed no deviations from the normal state. Correct management of such patient would be:

- 1) pharmacologic muscle relaxation;
- 2) education and stress control;
- 3) relaxation splint fabrication;
- 4) repositioning splint fabrication;
- 5) application of botulin toxin.

Correct answer is:

A. only 1. **B.** only 3. **C.** 1,2,3. **D.** 2,3. **E.** all of the above-mentioned.

71. For cementation of individual cores and posts, fabricated from cobalt-chrome alloys, following cements are used:

- 1) phosphate;
- 2) polycarboxylic;
- 3) glass-ionomer;
- 4) light cured composite;
- 5) dual composite.

Correct answer is:

A. 1,2,3. **B.** 1,2,3,4. **C.** 1,3,4,5. **D.** 4,5. **E.** all of the above-mentioned.

72. Method which allows for fabrication of metal coping of bridge veneered with porcelain is:

- 1) shuttering wax method;
- 2) selective laser smelting method;
- 3) milling of coping designed in CAD;
- 4) galvanofarming;
- 5) electro spark technology.

Correct answer is:

A. only 1. **B.** 1,3. **C.** 1,2,4. **D.** only 4. **E.** all of the above-mentioned

73. Clinical examination of 30-year-old patient revealed full dental arch in the maxilla, correct occlusal plane, absence of pathologic wear. In mandible, one-sided unbounded edentulous sections involving loss of molars. Primarily you would consider:

- A.** implantoprosthesis treatment.
- B.** mandibular cast removable denture.
- C.** mucosa-supported denture.
- D.** fusion of premolars and adding one molar.
- E.** it is not necessary to restore molars with support zones present.

74. In patients in developmental age, in the course of preparing a tooth for post and core it is necessary to:

- A.** prepare the root part maximally short.
- B.** leave the hard tissue ferrule under the gingival margin.
- C.** sparingly prepare the wide root canals.
- D.** machine preparation of the roots.
- E.** one must not wait until the end of apex formation.

75. At the point of control of mock partial mucosa-supported dentures in oral cavity, following elements are controlled:

- 1) stabilization;
- 2) static and dynamic occlusion;
- 3) height of central occlusion and anterior-posterior relation of the mandible to the maxilla;
- 4) accuracy of teeth alignment on the alveolar ridge;
- 5) esthetics.

Correct answer is:

A. 1,2. **B.** 2,3. **C.** 1,2,3. **D.** 1,4. **E.** all of the above-mentioned.

76. Preliminary prosthetic preparation before the commencement of cast removable dentures **does not** include:

- A.** fabrication of post and cores and crowns in endodontically treated teeth.
- B.** preparation of retentive surfaces with the use of prosthetic crowns.
- C.** preparation of places for occlusal rests in abutment teeth or planning the place for occlusal rests in prosthetic crowns.
- D.** correction of prosthetic field.
- E.** alignment of occlusal surface.

77. Plate connector in cast removable denture may be used in case of:

- 1) shallow oral cavity floor;
- 2) deep oral cavity floor;
- 3) high attachment of lingual frenum;
- 4) low crowns of anterior teeth;
- 5) high low crowns of anterior teeth.

Correct answer is:

A. 2,3,4. **B.** 2,4,5. **C.** 1,3,4. **D.** 1,3,5. **E.** all of the above-mentioned.

78. Prosthetic stomatopathies are differentiated with:

- 1) burning mouth syndrome;
- 2) erythema multiforme;
- 3) lichen planus;
- 4) leukoplakia;
- 5) fissure fibroma.

Correct answer is:

A. 1,3. **B.** 2,3,4. **C.** only 1. **D.** 1,2,3,4. **E.** all of the above-mentioned.

79. Face bow registration in fabrication of complete dentures are performed:

- A.** on the stage of mock dentures.
- B.** on the stage of assessing central occlusion.
- C.** after giving away the finished prostheses.
- D.** twice: after anatomic and functional impressions.
- E.** face bow is not used during fabrication of complete dentures.

80. Indicate true statements regarding individual trays:

- 1) the range of tray is determined by full extent of anatomic impression;
- 2) the range is determined by the dentist;
- 3) individual tray should cross the border of movable and immovable mucosa in case of extensive impressions;
- 4) individual tray should exhibit stabilization on prosthetic field;
- 5) they are made out of shellac, even when the impression is taken with thermoplastic material.

Correct answer is:

A. only 1. **B.** 2,4. **C.** 1,2,3. **D.** 2,4,5. **E.** all of the above-mentioned.

81. Indicate true statements regarding orientation lines mapped on working models during the designing of cast removable dentures:

- 1) mapping of orientation lines is performed before estimation of introductory path;
- 2) mapping of orientation lines begins with lines of largest protuberances of abutment teeth and range of undercuts on alveolar process;
- 3) line of largest protuberance and depression margin on lateral surface of alveolar process is mapped in case of analysis of maxilla and mandible models;
- 4) after drawing orientation lines, places for retentive surfaces are determined, in which proper parts of retentive arms are placed.

Correct answer is:

A. all of the above-mentioned. **B.** 1,2,4. **C.** 1,2,3. **D.** 2,3,4. **E.** 3,4.

82. Choose true statements regarding laboratory actions during fabrication of cast removable denture:

- 1) casting primary model, parallelometer analysis and designing metal part;
- 2) filling agar form with refractory die on vibration table;
- 3) gluing the primary model to the base of the duplication form and placing it in 35° C water bath, followed by sinking with liquid agar;
- 4) removing the model from agar form, followed by mixing the refractory die;
- 5) after setting of refractory die, secondary model is released from agar;
- 6) blocking the undercuts with wax under retentive arms with overabundance below planned clasp. Wax margin is formed with a margin along the gingival clasp margin;
- 7) blocking the undercuts with wax in all other teeth;
- 8) submerging the secondary model in stabilizing liquid;
- 9) drying the secondary model;
- 10) transfer of cast removable denture drawing from primary to secondary model.

Correct answer is:

A. 1,10,2,3,6,4,5,7,8,9. **B.** 1,6,3,7,4,8,5,9,2,10. **C.** 1,6,7,3,4,2,5,10,9,8.
D. 1,2,3,4,5,7,6,8,9,10. **E.** 1,3,7,4,6,10,8,9,2,5.

83. Indicate true sentences regarding resting places supporting the denture:

- 1) it may constitute the independent part connected with denture core, apart from other elements;
- 2) it may be connected with clasp and fused with denture core with the same connector as clasp with connector;
- 3) it is not considered an indirect retainer;
- 4) rest place connector is a rigid element of denture.

Correct answer is:

- A.** 1,4. **B.** 1,2,3. **C.** 2,3,4. **D.** 1,3,4. **E.** 2,3.

84. In adaptive period after receiving new dentures, patients may complain to teeth knocking, which is mainly caused by:

- 1) poor adhering of denture base;
- 2) inaccurate processing and polishing;
- 3) absence or insufficient shaping of denture margins;
- 4) improper alignment of dental arches;
- 5) increase in occlusion height;
- 6) decrease in occlusion height.

Correct answer is:

- A.** 1,6. **B.** 3,4. **C.** only 5. **D.** only 6. **E.** 1,2.

85. Indicate advantages of immediate dentures:

- 1) immediate denture influences positively the process of post-extraction wounds healing;
- 2) denture base is acting as wound dressing, protecting it from injuries, and clot from being flushed out;
- 3) it allows for more proper nutrition in the period of post-extraction wound healing;
- 4) it influences positively retaining of the shape and size of alveolar process;
- 5) it promotes better retention and denture stabilization, due to the fact that alveolar process preserves longer the shape of semi-circular ridge and is smoother in cases, where it is shaped after teeth extraction without the influence of denture;
- 6) it allows for maintaining proper pronunciation.

Correct answer is:

- A.** all of the above-mentioned. **B.** 1,2,4,6. **C.** 1,3,4,5. **D.** 2,3,5,6. **E.** 3,4,5,6.

86. Once of the causes of prosthodontic stomatopathy development is mechanical injury, which:

- 1) develops due to poor adhering of denture base;
- 2) it develops due to excessive irregularity and coarseness of gingival side of denture;
- 3) it develops due to insufficient stabilization of dentures;
- 4) it may not develop due to incorrect assessment of occlusal height;
- 5) it is not connected to around-the-clock denture use.

Correct answer is:

- A.** 1,2,3,5. **B.** 1,2,3. **C.** 1,2,5. **D.** 1,2,4. **E.** 3,4,5.

87. Indicate true statements regarding telescoping crowns:

- 1) they serve as fixation elements for cast removable dentures;
- 2) they constitute of prosthetic crown anatomically shaped fixed on abutment tooth and crown shaped as cylinder or cone connected to removable denture;
- 3) in case of several telescopic crown fabrication, parallelism of abutment teeth is not required;
- 4) mechanism of telescopic crowns consists in using the friction force or wedging;
- 5) there is a simple access for periodontologist during periodontal surgery.

Correct answer is:

A. all of the above-mentioned. **B.** 1,2,4. **C.** 1,3,5. **D.** 1,4,5. **E.** 2,3,4.

88. Choose indications for using overdentures based on residual dentition:

- 1) presence of one or more roots of teeth properly endodontically treated;
- 2) elements ensuring additional retention may be axial retainers, telescoping crowns and splint bars;
- 3) most beneficial is, when abutment teeth and roots are located in mandible in anterior or lateral section;
- 4) most beneficial conditions are obtained if there are canines or premolars located bilaterally present.

Correct answer is:

A. all of the above-mentioned. **B.** 1,2,4. **C.** 1,2,3. **D.** 1,3,4. **E.** 3,4.

89. Indicate true statements regarding overdentures:

- 1) procedure in case of fabrication of such dentures is identical to this of conventional complete dentures, following by preparation of residual dentition, which is accessory or main retention for dentures;
- 2) thanks to overdentures, it is possible to preserve the teeth as integral part or alveolar process, which allows for better denture retention;
- 3) due to dentin support, higher muscle forces are triggered and masticatory effectiveness is improved;
- 4) stage of alveolar process atrophy is increased;
- 5) better stabilization and retention is observed.

Correct answer is:

A. all of the above-mentioned. **B.** 1,2,3. **C.** 2,4,5. **D.** 2,3,5. **E.** 1,3,5.

90. Indicate true statements regarding resting places:

- 1) it should closely adhere to the tooth surface, forming its negative, at the same time not disturbing the occlusion;
- 2) surface of the resting place on the tooth is ranged from 2 to 22 mm²;
- 3) rigid rest occurs when the resting place is placed on the surface of a tooth adjacent to the gap;
- 4) rigid distant rest occurs when the resting place is placed on the surface of a tooth adjacent to the gap, but on the opposite side;
- 5) rigid distant rest occurs when the rest place is located on the second or further tooth from the gap.

Correct answer is:

A. 2,5. **B.** 1,2,5. **C.** 1,3,4,5. **D.** 1,3. **E.** 4,5.

91. Indicate true statements regarding resting places:

- 1) it is a metal pique which derives from the denture connector or clasp, resting on abutment tooth;
- 2) in unbounded edentulous sections close rests are designed, in order to the clasp line, which constitutes the rotation axis of the denture, to run in the area of resting surface of the denture;
- 3) place for resting space is determined after the analysis of occlusal contacts of opposite teeth;
- 4) if there is no suitable space for the resting place, it should be artificially created through grinding enamel layer;
- 5) space left after grinding the enamel layer should be secured with fluoride preparation.

Correct answer is:

A. 2,3,4. **B.** 1,2,3. **C.** 1,3,4,5. **D.** 1,2,4,5. **E.** 2,4,5.

92. Indicate true statements regarding upper complete denture support:

- 1) it depends largely on correct marginal sealing;
- 2) it is influenced by the shape of hard palate vault – the most beneficial shape is vault in the shape of inverted Y (gothic palate);
- 3) thickness and mucosa susceptibility is of great importance;
- 4) posterior seal in complete upper denture should run along the outline of palatal ridge;
- 5) in posterior border seal's course one need to pay attention to mandibulo-alar fold.

Correct answer is:

A. all of the above-mentioned **B.** 1,2,3,4 **C.** 1,3,5 **D.** 1,3,4,5. **E.** 2,4,5

93. Arrange the polymerization phases from the moment of mixing the powder with liquid:

- 1) wet sand;
- 2) dough;
- 3) splitting;
- 4) preliminary polymerization;
- 5) bulking;
- 6) strands.

Correct answer is:

A. 1,2,3,4,5,6. **B.** 3,6,5,1,2,4. **C.** 1,5,3,6,2,4. **D.** 1,3,6,5,2,4 **E.** 1,4,3,5,6,2.

94. Indicate true statements regarding the mucostatic functional impression:

- 1) it reproduces the shape of prosthetic field covered with unmovable mucosa;
- 2) it reproduces the shape of anatomical oral cavity elements covered both with unmovable and not very active movable mucosa of physiological tongue and cheeks movement;
- 3) extension dentures are based on them;
- 4) it involves only unmovable mucosa;
- 5) it is used mainly in mandible;
- 6) it is used mainly in maxilla.

Correct answer is:

A. 1,2,3. **B.** 1,4,6. **C.** 2,3,5. **D.** 3,4,5. **E.** 1,4,5.

95. Indicate true statements regarding cuspal articulation methods according to Gysi:

- 1) it is required to achieve bilateral occlusion balanced with the elimination of Christensen phenomena;
- 2) calotte method is used for shaping the dental arches according to Spee and Monson lines;
- 3) flat cusped teeth are used;
- 4) articulators are not needed;
- 5) inclination of lateral teeth cusps and axis of anterior teeth should be adapted to the path of articulator's articular head;
- 6) anatomical teeth are used;
- 7) articulators are used.

Correct answer is:

A. 2,5,6,7. **B.** 1,5,6,7. **C.** 1,2,3,4,5. **D.** 1,2,6,7. **E.** 1,2,5,6.

96. Indicate, what is the cause of ordering secondary sealing of the dentures:

- 1) palatal vault;
- 2) susceptibility of palate in the adipose zone;
- 3) polymerization shrinkage of acrylic;
- 4) remnants of unreacted residual monomer;
- 5) necessity for relieving the denture base in the AH zone;
- 6) seal of denture base, facilitating achieving the vacuum under the base.

Correct answer is:

A. 2,5. **B.** 1,3,6. **C.** 2,6. **D.** 1,4,6. **E.** 3,4,5.

97. Alignment of lateral teeth in complete dentures with calotte method in cracow's modality, according to compensative lines:

- 1) it allows for achieving incisal guiding;
- 2) it is intended to ensure the waiver of Christensen phenomena;
- 3) it ensures bilaterally balanced occlusion;
- 4) it ensures achieving group guiding;
- 5) it ensures achieving canine guiding;
- 6) it ensures one-sided balanced occlusion.

Correct answer is:

A. 1,3. **B.** 1,2,5. **C.** 2,6. **D.** 2,3. **E.** 2,5,6.

98. Indicate symptoms indicating the occurrence of parafunctional activity:

- 1) pathologic tooth wear;
- 2) presence of wedge defects;
- 3) McCall festoons and Stillman fissures;
- 4) enamel cracks;
- 5) enamel damage on labial surfaces of anterior lower teeth;
- 6) masseter hyperplasia;
- 7) buccal mucosa maceration in occlusal line;
- 8) radiating pain from the overloaded muscles.

Correct answer is:

A. 1,3,6. **B.** 1,3,6. **C.** 2,5,7. **D.** 1,5,7,8. **E.** all of the above-mentioned.

99. The procedure of establishing correct relation of mandible to maxilla, with presence of both occlusal rims during third visit, carried out in edentulous patient includes:

- 1) bringing the mandible to posterior occlusal relation, following shifting the mandible in medial line by 1mm anteriorly;
- 2) bringing the mandible to central occlusal position, followed by withdrawal of mandible to the posterior occlusal relation;
- 3) asking the patient to swallow;
- 4) earlier establishing the course of prosthetic plane of upper rim, lower rim's correction and establishing the occlusal height;
- 5) due to adaptive processes, it is dependent on the height of previously used dentures;
- 6) using the placement of the end of the tongue in anterior part of palate.

Correct answer is:

A. 1,3. **B.** 2,5. **C.** 1,6. **D.** 2,6. **E.** 1,4.

100. Indicate true statement regarding functional impressions, preformed in the process of prosthetic rehabilitation in edentulous patients:

- 1) they are performed on individual trays or previous denture, under the assumption that the denture meets the clinical requirements;
- 2) for both jaws, the range control of trays requires Herbst tests;
- 3) during performing the upper functional impression, secondary seal may be performed;
- 4) they are performed in order to increase the accuracy of prosthetic field reproduction;
- 5) for performing functional impressions, among others, reversible impression materials are used;
- 6) materials used for individual tray fabrication is shellac, fast polymerising material and composite material.

Correct answer is:

A. 1,3. **B.** 1,2,6. **C.** 1,3,6. **D.** 2,4. **E.** 1,5.

101. Proprioceptive mechanisms are used in order to transfer the information to the central nervous system. Information concerning:

- 1) dimensional position of the mandible;
- 2) malocclusion;
- 3) presence of mouthful bite;
- 4) antagonistic contacts;
- 5) efficiency of the masticatory system.

Correct answer is:

A. 1,3,5. **B.** 2,4. **C.** 1,3,4. **D.** 4,5. **E.** 1,4,5.

102. Supple classification is used to evaluate the tissue conditions (mucosa and bone) of a basal seat area in the edentulous mouth. Indicate the conditions that classify the oral cavity as class 4:

- 1) well-defined alveolar processes and high-arched palate;
- 2) smooth, resilient, unmovable mucosa, ligament attachments localized at the base of alveolar processes;
- 3) atrophy of the bone basal seat area, flat palate;
- 4) maxillary tuberosities seemingly well-formed, soft, movable;
- 5) alveolar ridge is movable, displaceable, resembling a rooster comb;
- 6) alveolar processes seemingly well-formed, movable;
- 7) mucosa in the whole area is flabby, expanded, immovable;
- 8) soft basal seat area shows different density and susceptibility to pressure.

Correct answer is:

- A.** 1,2,6,8. **B.** 3,4,5,6,7. **C.** 2,3,4,5. **D.** 3,5,6,8. **E.** 1,4,5,6,8.

103. Indicate the order of clinical procedures in fabrication of complete dentures:

- 1) interview, examination, occlusion determination;
- 2) interview, examination anatomical impressions;
- 3) pouring the models, individual trays fabrication;
- 4) customizing the individual trays, functional impressions;
- 5) trying in the mock up dentures;
- 6) central occlusion determination, selecting the artificial teeth;
- 7) aligning the teeth in working models;
- 8) sealing the posterior border of upper complete denture using indirect method, marking the rest places;
- 9) sealing the posterior border of upper mock up denture using direct method, marking the rest places;
- 10) acrylic pressing and denture polymerization;
- 11) customizing and handing over the dentures, patient instruction;
- 12) control visits;
- 13) relining the dentures.

Correct answer is:

- A.** 1,2,4,6,5,7,9,10,11,13. **B.** 2,4,6,5,8,11,12. **C.** 2,3,4,6,7,9,10,11,12.
D. 2,3,4,6,7,5,9,10,11,13. **E.** 2,3,6,5,9,11,12.

104. Indicate impression materials used for functional impressions:

- 1) alginate;
- 2) agar;
- 3) zin-oxide-eugenol;
- 4) impression wax;
- 5) elastomers;
- 6) model plaster;
- 7) impression plaster.

Correct answer is:

- A.** 1,2,3. **B.** 2,3,4. **C.** 2,4,5,7. **D.** 3,4,5,7. **E.** 3,4,5,6,7.

- 105.** Indicate the order of clinical procedures during preparation of a tooth for individual post and core:
- A.** caries and old fillings removal, preparing the coronal part of the post for a crown, perpendicular cutting of crown's thin walls, preparing the root, preparing the orifices, securing with temporary filling.
 - B.** caries and old fillings removal, preparing the coronal part of the post for a crown, preparing the root, preparing the orifices, securing with temporary filling.
 - C.** caries and old fillings removal, preparing the coronal part of the post for a crown, perpendicular cutting of crown's thin walls, preparing the root, securing with temporary filling.
 - D.** preparing the coronal part of the post for a crown, perpendicular cutting of crown's thin walls, preparing the root, securing with temporary filling.
 - E.** none of the above-mentioned is true.
- 106.** A patient reported to the dental office in order to have a complex crown on tooth 22 made. After the procedure, the tooth needs to be secured with temporary crown. In order to do so, the dentist should:
- A.** take the impression after grinding and transfer it to the lab.
 - B.** secure the tooth with temporary cement.
 - C.** take the impression before grinding, followed by fabrication of the temporary crown on site;.
 - D.** fabricate the temporary crown in the lab before grinding.
 - E.** it is most beneficial to not secure the grinded tooth.
- 107.** A patient reported to the dental office in order to extract tooth 11, which was longitudinally fractured. Adjacent teeth 12 and 21 required ultimately crowns fabrication. Directly after extraction, immediate implantation was planned. In order to immediately restore the gap, one should perform:
- A.** temporary removable denture.
 - B.** temporary acrylic bridge after preparing the adjacent teeth, which required prosthetic treatment.
 - C.** adhesive bridge, in case of favorable occlusal conditions.
 - D.** implantation with immediate loading.
 - E.** all of the answers are true.
- 108.** A patient reported to the dental office due to fractured base of partial mucous based denture. In order to repair the denture, it is necessary to:
- A.** transfer the denture to the lab for repairs.
 - B.** take an impression with the denture and after casting the model, repair the denture in the lab.
 - C.** take an impression without the denture and after positioning the denture on the model, repair it.
 - D.** the dentist should attach the clasp by himself in the office.
 - E.** fabricate new denture.

- 109.** Using immediate dentures is very beneficial and comfortable for the patient, however it requires additional activities which constitute in appropriate preparation of the working plaster model, which is performed in:
- A. the lab and by a technician.
 - B. in the dental office and by the dentist.
 - C. in the dental office and by the dental assistant.
 - D. the lab and by the dental assistant.
 - E. in the dental office and by a technician.
- 110.** Indicate the order of visits and clinical procedures connected with fabrication of immediate dentures:
- A. radiograms analysis, surgery, anatomic impressions, central occlusion determination, handing over the denture.
 - B. taking impressions, central occlusion determination, surgery, mock up try-in, handing over the denture.
 - C. interview and examination, surgery, taking impressions, central occlusion determination, mock up try-in, handing over the denture.
 - D. interview and examination, taking impressions for working models, determination of central occlusion along with color, mock up try-in, surgery along with handing over the denture.
 - E. anatomic impressions, surgery, determination of central occlusion along with color, mock up try-in, handing over the denture.
- 111.** Indicate true statements regarding occlusal plane:
- A. it constitutes the sum of occlusal surfaces of upper and lower arch, remaining in occlusal contact.
 - B. it results from medial shifting of the condyle in the projection on horizontal plane.
 - C. it connects the spina nasalis anterior with highest points of external auricular meatuses.
 - D. it determines the position of anatomic elements in the TMJs.
 - E. it is defined as hypothetical plane resulting from connection of point located on the incisal edge of medial lower incisors and buccal cusps' peaks of first lower molars.
- 112.** Ferrule effect **does not** influence:
- A. the increase of relation of post and core length to its core length.
 - B. post retention improvement.
 - C. port sealing improvement.
 - D. prevention of connecting cement wash out.
 - E. none of the above-mentioned.
- 113.** Bonwill triangle height is:
- A. 5.5 cm.
 - B. 6 cm.
 - C. 8.5 cm.
 - D. 10 cm.
 - E. 12 cm.

114. In order to allow for proper rotation of the condylar process and fluid protrusion of a mandible with disclusion of the lateral teeth (Chirstensen's phenomenon) it is advised for the incisal guiding to:

- A.** be lower than the articular guidance.
- B.** be even or up to 15 degrees higher than the articular guidance .
- C.** be higher up to 30 degrees than the articular guidance.
- D.** must be exactly 5 to 10 degrees.
- E.** must be exactly 60 to 85 degrees.

115. Indicate the aims of parallelometer analysis of working models during planning of cast removable dentures:

- 1) finding the possibility of optimum fixation of the cast removable denture;
- 2) finding 2 or 3 parallel teeth for designing the rests;
- 3) finding parallel surfaces in order for designing the denture base;
- 4) finding the insertion path, in which most valuable clasp surfaces are obtained;
- 5) obtaining appropriate data for appropriate planning of the construction elements.

Correct answer is:

- A.** 1,2,3,4. **B.** 1,4,5. **C.**1,3,4,5. **D.** 1,2,4,5. **E.** 2,3,4,5.

116. Choose true statements regarding clinical management during fabrication of cast removable denture:

- 1) control of mock up denture with aligned teeth;
- 2) central occlusion determination;
- 3) interview and clinical examination, radiogram analysis;
- 4) anatomic impressions;
- 5) parallelometer analysis of diagnostic models;
- 6) prosthetic preparation of oral cavity for cast removable dentures;
- 7) working impressions;
- 8) metal cast try on, color determination;
- 9) handing over the finished denture.

Correct answer is:

- A.** 4,6,2,5,7,8,1,9. **B.** 6,3,4,2,5,7,8,1,9. **C.** 3,4,5,6,7,2,8,1,9. **D.** 3,4,2,6,7,5,8,1,9.
E. 3,6,4,5,7,2,8,1,9.

117. Supporting elements in cast removable dentures one may use:

- 1) major connectors;
- 2) retentive mesh;
- 3) occlusal rest;
- 4) latch;
- 5) splint bars;
- 6) clasps;
- 7) telescopic crowns.

Correct answer is:

- A.** 1,3,4,5,7. **B.** 3,4,5,6,7. **C.** 3,4,5,7. **D.** 4,5,7. **E.** 1,2,3,6.

118. Indicate surfaces, which are parallel to the analyser:

- 1) retentive;
- 2) classic guiding;
- 3) active guiding;
- 4) passive guiding;
- 5) stabilization;
- 6) indirect;
- 7) insertion.

Correct answer is:

- A.** 2,4. **B.** 1,3. **C.** 2,3,4. **D.** 2,5,7. **E.** 5,6,7.

119. Retentive arm type, in which only the actual part adheres to the tooth surface, whereas the indirect part runs above the gingiva, is called:

- A.** straight.
- B.** return.
- C.** circumferential..
- D.** ring.
- E.** supragingival.

120. Indicate **false** statements regarding posts and cores:

- A.** standard metal-based posts and cores, due to many faults should be used less and less often in clinical practice.
- B.** individual posts and cores may be used in case of a significant damage of clinical crowns up to the gingiva.
- C.** the higher the modulus of elasticity of post restoring the coronal part of the post and core, the lower tension form in the crown and cement.
- D.** material, out of which ceramic posts are fabricated of, is zircon oxide ceramics.
- E.** posts and cores with fiberglass, as an restorations of high durability, are currently used in anterior and posterior section of dental arch.

121. In case of *stomatitis prothetica hyperplastica*, comprehensive diagnostic and treatment management should include:

- A.** clinical diagnosing of hyperplasia and denture adjustment.
- B.** mycologic examination and antifungal treatment.
- C.** gastroenterological consult and *Helicobacter pylori* eradication.
- D.** surgical removal of hyperplastic lesions and histopathologic examination and denture replacement.
- E.** all of the above-mentioned answers are true.

122. In the treatment of stomatopathies complicated with *Candida*, nystatine suspension is effective, applied by the patient on mucosal surface of the denture base over the period of:

- A.** 5 days.
- B.** 7 days.
- C.** 14 days.
- D.** 3 weeks.
- E.** 1 month.

123. Characteristic feature of prosthetic stomatopathies, especially in older patients, are perleches in one or both mouth angles. They may be observed in case of:

- 1) dentures with lowered occlusal height;
- 2) dentures with heightened occlusal height;
- 3) traumatic effect of the denture base, caused by vertical occlusal forces;
- 4) traumatic effect of the denture base, caused by alignment of high cusped teeth;
- 5) constant retention of saliva and bacteria in folds between the lips, which causes non-healing infections of this area.

Correct answer is:

- A.** 1,3. **B.** 2,5. **C.** 1,4. **D.** 3,4. **E.** 1,5.

124. Tooth constitutes an optimum abutment of prosthetic bridge, if the crown to root ratio is:

- A.** 1:1.
- B.** 2:1.
- C.** 2:2.
- D.** 2:3.
- E.** 3:2.

125. In case of preparing the teeth for bridges based on zirconium dioxide ceramics coping, following guidelines should be implemented:

- 1) preparation should ensure appropriate space for the coping; minimum of 0,4 mm and veneering layer; from 1 mm at the crown margin up to 1.5 mm; 2 mm on occlusal surface or incisal edge;
- 2) preparation should ensure appropriate space for coping; maximum of 0,4mm and veneering layer; 1.5 mm at the crown margin, up to 2; 2.5 mm on occlusal surface or incisal edge;
- 3) the margin should be of shoulder or chamfer type;
- 4) the margin should be of rounded shoulder or heavy chamfer type;
- 5) sharp preparation margins and undercuts should be avoided;
- 6) the preparation should be sharply contoured;
- 7) bridge connectors of pontics to crowns must be of minimum size: from 9 mm in anterior section to 12 mm in lateral section;
- 8) bridge connectors of pontics to crowns must be of maximum size from 9 mm in anterior section to 12 mm in lateral section.

Correct answer is:

- A.** 1,3,5,6,7. **B.** 1,4,5,7. **C.** 1,4,6,7. **D.** 1,2,5,8. **E.** 3,5,6,8.

126. Arrange the correct order of laboratory execution of zircon oxide coping bridge in the CAD/CAM system:

- 1) designing the virtual model of zirconium coping using a computer;
- 2) excising the coping from pressed zirconium block using numerically controlled milling machine;
- 3) casting the working and diagnostic models;
- 4) sintering the zirconium coping;
- 5) processing the veneering porcelain in a layering technique.

Correct answer is:

- A.** 3,4,1,5,2,6. **B.** 3,4,1,5,2. **C.** 3,4,1,2,5,6. **D.** 3,4,1,2,5. **E.** 3,4,1,2,6,5.

127. Three-part pontic, on the same cross-section will possess deflection higher than the 1 part by:

- A. 2 times.
- B. 4 times.
- C. 8 times.
- D. 9 times.
- E. 27 times.

128. The condition of using third molars as bridge abutments is:

- 1) their complete eruption;
- 2) healthy periodontium;
- 3) sufficiently long and separate roots;
- 4) absence or slight anterior inclination.

Correct answer is:

- A. 1,3. B. 1,2,3. C. 1,3,4. D. all of the above-mentioned. E. only 1.

129. Forces acting on retentive elements of the bridge in comparison to forces applied to prosthetic restoration of a single tooth (crowns), have:

- A. different direction, and its value is the same.
- B. they differ in value and direction.
- C. they differ in value, and the direction is the same.
- D. forces balancing out the retentive elements of the bridge run usually into the anterior-lateral direction, and in the presence of single crown-bucco-lingual.
- E. answers B and D are true.

130. Fixative function of clasps in cast removable dentures depends on:

- 1) anatomic shape of abutments;
- 2) mutual dimensional relation of lateral walls to the abutments;
- 3) introductory path;
- 4) clasp structure;
- 5) type of dental loss.

Correct answer is:

- A. 1,3,4. B. 2,3,5. C. 1,4,5. D. 1,2,4. E. 4,5.

131. Absolute feature of all introductory paths, which allows for cast removable denture to be fabricated, is:

- 1) presence of retentive and guiding surfaces;
- 2) appropriately long introductory path;
- 3) possibility of continuous clasp to be designed;
- 4) possibility of contact placement of lingual arch;
- 5) introductory surfaces of good quality.

Correct answer is:

- A. only 1. B. 2,3. C. 3,4. D. only 5. E. 1,5.

132. One of the most common faults of casting technology is presence of air in the casting molding due to lack of venting canals. Indicate which imperfections visible in the cast are its consequence:

- 1) cracking of casting molding;
- 2) wrong size of the cast;
- 3) incomplete cast;
- 4) small pearls on the cast surface;
- 5) dark color of the cast;
- 6) reverse porosity.

Correct answer is:

A. 1,5. **B.** 2,6. **C.** 2,4. **D.** 1,3. **E.** 3,4.

133. Indicate the features of polyether chemical-curing impression material:

- 1) hydrogen is a by-product of binding;
- 2) it exhibits strong hydrophilic properties;
- 3) lack of smell and taste;
- 4) the impression should be cast as quickly as possible after taking it;
- 5) during binding, increase in temperature occurs by 4.2°C;
- 6) the material exhibits a double-snap effect;
- 7) transparent trays are necessary for taking an impression;
- 8) it is used for example for functional impressions in edentulous maxilla and mandible;
- 9) binding reaction is accompanied by temperature increase of 1°C;
- 10) water is a by-product of binding, which influences the volumetric changes in the impression;
- 11) it is used for isolation of the teeth from the plaster during the flasking process;
- 12) it is characterized by high rigidity after binding.

Correct answer is:

A. 2,5,8,12. **B.** 1,2,3,6,11. **C.** 3,4,7,9,10,12. **D.** 1,3,5,6,8,11,12.
E. 2,4,6,8,9,10,11,12.

134. During alignment of lateral teeth in complete dentures, buccal corridor must be maintained, which means that during smiling, in the lip corner, dark triangle should be visible. Which line constitutes its medial border?

- A.** smiling.
- B.** canine.
- C.** corner of the mouth.
- D.** camper.
- E.** medial.

135. Longitudinal reinforcement of bridge pontic consists in:

- A.** thickening of the metal coping.
- B.** using a latch on at least one abutment.
- C.** incorporating additional abutments.
- D.** widening the bucco-lingual dimension.
- E.** strengthening of abutment teeth with crown-root inserts.

136. Dental bonding agent procedure or immediate dentine sealing, is not used during fabrication of:

- 1) veneers;
- 2) overdentures;
- 3) composite onlays;
- 4) cast removable dentures;
- 5) complete dentures;
- 6) crowns on implants.

Correct answer is:

A. 1,2,3. **B.** 1,3. **C.** 4,5,6. **D.** 2,4,5,6. **E.** all of the above-mentioned.

137. What **is not** responsible for fixating a mucous-retained denture:

- A.** the use of bendable, single, single-arm buckles, where the role of the stabilizing arm is played by the lan buckle.
- B.** wedge force.
- C.** muscle action force.
- D.** adhesion force.
- E.** cohesion force.

138. Indicate true statements regarding biofunctional prosthetic system:

- 1) functional impressions are taken with the mouth closed with polyether impression materials;
- 2) functional impressions are taken with silicone impression materials with closed mouth;
- 3) functional impressions are taken with silicone impression materials with open mouth;
- 4) it requires the use of face bow;
- 5) it requires the use of Stratos articulator.

Correct answer is:

A. 1,2,4. **B.** 1,2,5. **C.** 1,2,4,5. **D.** 2,4,5. **E.** 1,3,4,5.

139. Indicate true statements regarding single dental clasp:

- 1) it consists in two arms;
- 2) it consists in one arm;
- 3) it embraces the crown from lingual and vestibular side;
- 4) it embraces the crown from vestibular side;
- 5) in greater number it creates a collaborative clasp.

Correct answer is:

A. 2,3. **B.** 2,4. **C.** 2,5. **D.** 1,3,5. **E.** 1,5.

140. Data obtained from parallelometer analysis are the basis for:

- 1) determining the most appropriate insert direction;
- 2) appropriate planning and location of sublingual arch;
- 3) appropriate planning of clasp surfaces;
- 4) determining the range of undercuts block;
- 5) choosing the elements retaining and supporting the denture.

Correct answer is:

A. 1,3,5. **B.** 2,3,5. **C.** 1,2,5. **D.** 1,2,3,4. **E.** all of the above-mentioned.

141. In an edentulous patient during prosthetic rehabilitation with BPS system, second management stage according to Majewski should be:

- A. anatomic impressions in standard trays.
- B. using centric tray.
- C. functional impressions with mouth closed.
- D. functional impressions with mouth open.
- E. inspecting mock up occlusal rims.

142. Prosthetic field atrophied and hard according to Supple is characterised by:

- 1) low-arched palate;
- 2) well-defined palatine torus;
- 3) rooster comb;
- 4) various density of basal seat tissues;
- 5) thin and not susceptible mucosa.

Correct answer is:

- A. 1,2,5. B. 1,4. C. tytko 2. D. 3,4. E. 1,3.

143. Cementing of ceramic veneers is carried out:

- 1) with the use of composite cements;
- 2) from the incisal edge towards the apico-gingival direction;
- 3) with the use of glass-ionomer cements;
- 4) excess of the cement is removed after final binding;
- 5) in initial phase, it is light cured point-like for 2 seconds for the material to partially polymerize.

Correct answer is:

- A. 1,3,4. B. 1,2,5. C. 1,2,4. D. 3,4. E. 1,4,5.

144. Indicate true statement regarding the mucodynamic impressions:

- 1) it is taken in maxilla and mandible;
- 2) it includes movable and not movable mucosa;
- 3) it is taken in mainly in mandible;
- 4) extension dentures are based on them;
- 5) it includes only movable mucosa.

Correct answer is:

- A. 1,2,3. B. 2,3,4. C. 4,5. D. 1,5. E. 1,2,5.

145. Material used for fabrication of temporary restoration should be characterized with:

- 1) easy to polish;
- 2) biocompatible;
- 3) good looks;
- 4) appropriate durability;
- 5) resistance to wear;
- 6) low temperature of oral cavity polymerization;
- 7) stability during binding;
- 8) appropriate working time.

Correct answer is:

- A. 1,3,5,7. B. 2,4,5,6,7. C. 1,2,3,4,5. D. 2,3,4,7,8. E. all of the above-mentioned.

146. PVEMA is a derivative of methacrylates and characterized with:

- 1) lower temperature of exothermic reaction than PMMA;
- 2) lower monomer toxicity than PMMA;
- 3) high porosity.

Correct answer is:

A. 1,2. **B.** 1,3. **C.** only 1. **D.** 2,3. **E.** all of the above-mentioned.

147. Which material is used For fabrication of prefabricated crowns:

- A.** polycarbonates.
- B.** acetyl cellulose.
- C.** aluminum.
- D.** alloy of tin and silver.
- E.** all of the above-mentioned.

148. Which cement is used for cementing temporary restorations:

- A.** phosphate.
- B.** carboxyl.
- C.** zinc-oxide-eugenol.
- D.** containing calcium oxide.
- E.** true answers are C and D.

149. Preparing the surface of silicone restorations for adhesive cementing consists in:

- 1) degreasing the surface with alcohol;
- 2) etching its internal surface with 9.5% hydrofluoric acid (1 to 5 min);
- 3) rinsing the surface in alcohol solution or distilled water and drying;
- 4) silane application;
- 5) bond and composite cement application.

Correct answer is:

A. 1,3,4,5. **B.** 1,2,4,6. **C.** 2,3,5,6. **D.** all of the above-mentioned. **E.** 1,4,5,6.

150. Effect of poorly made or lack of temporary restoration is:

- 1) hyperaemia, inflammation, necrosis of the pulp;
- 2) local gingivitis;
- 3) recession of gingival margin;
- 4) tooth protrusion from the alveolus;
- 5) horizontal tooth mobility.

Correct answer is:

A. all of the above-mentioned. **B.** 3,4. **C.** 3,5. **D.** 2,3,4. **E.** 1,2,4.

151. Total etch technique consists in:

- A.** selective etching of enamel with 37% orthophosphoric acid for 30 sec.
- B.** selective etching of enamel with 37% orthophosphoric acid for 10 sec.
- C.** selective etching of enamel with 37% orthophosphoric acid for 30 sec, and dentin for 15sec.
- D.** selective etching of enamel with 7% orthophosphoric acid for 30 sec.
- E.** this technique is not used in prosthodontics.

152. Immediately dentin sealing technique consists in:

- A.** fabricating temporary restorations from composite.
- B.** securing the tooth after grinding.
- C.** before taking the impression, by removing the smear layer and applying adhesive preparations.
- D.** securing the tooth after grinding by etching the stump and applying calcium oxide.
- E.** securing the tooth after grinding by applying silver nitrate preparation.

153. In order to cement a temporary restoration made from acrylic on an abutment with vital tooth you may use:

- 1) zinc-oxide-eugenol cement;
- 2) zinc-oxide cement;
- 3) cement containing calcium hydroxide;
- 4) carboxylate cement;
- 5) oxydent in mixed with Vaseline.

Correct answer is:

- A.** 1,2,3. **B.** 1,2,5. **C.** tyko 2. **D.** 2,3,5. **E.** 4,5.

154. Ideal cement should be characterized with:

- 1) cariostatic action;
- 2) be transparent or in the color of the tooth;
- 3) lack of solubility in water and acids;
- 4) high durability for compression and stretching;
- 5) good adhesion to tissues and restorations;
- 6) appropriate time of mixing and binding;
- 7) low viscosity.

Correct answer is:

- A.** 1,2,3,4. **B.** 1,3. **C.** 3,6,7. **D.** 1,5,7. **E.** all of the above-mentioned.

155. Composite materials containing UDMA are characterized with:

- A.** low temperature if exothermal reaction.
- B.** low margin integrity.
- C.** high polishability.
- D.** low polishability.
- E.** answers A,B and D are true.

156. Bis-acrylates are presently most commonly used group of materials during temporary restorations fabrication. Indicate product which belongs to this group:

- A.** Protemp 4 (3M ESPE).
- B.** B.Triad (Dentsply).
- C.** C Revotec (GC) **D.**
- D.** Vitremer Luting Cement (3M ESPE).
- E.** Ketac Cem (3M ESPE).

157. "Cover the surface with electro-galvanized thin layer of tin, rinse thoroughly and dry, apply metal primer (for 30 sec) dry, apply cement". Such protocol is implemented for cementing restorations made of:

- A. feldspathic ceramics.
- B. precious metals.
- C. base metals.
- D. lithium disilicate.
- E. composite.

158. Self-adhesive composite cements are characterized with:

- A. easy and fast application.
- B. color and transparency similar to tissues.
- C. low solubility.
- D. high chemical durability.
- E. all of the answers are true.

159. Zinc-phosphate cement may be used for cementing:

- 1) zircon oxide crowns;
- 2) metal based post and cores;
- 3) metal crowns;
- 4) metal-ceramics crowns;
- 5) metal-ceramics bridges;
- 6) Rhein axial latches;
- 7) composite crowns.

Correct answer is:

A. 1,3,7. **B.** 2,3,4,5,7. **C.** 1,2,3,4. **D.** 2,3,4,5,6. **E.** 2,3,4,5,6,7.

160. Cement exhibits low adhesion to enamel, dentin and metals, it is fragile, releases fluoride, initially sensitive to moisture and dryness, of high early solubility, initially has low pH. Indicate described cement:

- A. glass-ionomer.
- B. B-polycarboxylate.
- C. zinc-phosphate.
- D. conventional composite.
- E. self-adhesive composite.

161. Planning full ceramic crown cemented self-adhesively one needs to remember that, directly after grinding one should not use products impairing future process of enamel and dentin etching, containing:

- A. fluoride.
- B. calcium oxide.
- C. ethyl alcohol.
- D. orthophosphoric acid.
- E. water.

162. Cad/Cam technique allows for fabrication of crowns and bridges in individual direct technique during single visit, with the use of:

- A. metal blocks.
- B. composite blocks.
- C. acrylic blocks.
- D. answers A and B are true.
- E. answers B and C are true.

163. Individual temporary crown may be obtained using:

- 1) direct impression method;
- 2) indirect impression method;
- 3) individual thermoplastic matrices;
- 4) celluloid matrices filled with composite;
- 5) polycarbonate matrices adopted to said patient.

Correct answer is:

- A. 1,2,4. B. 1,2,3. C. 1,3,5. D. 1,2,5. E. 3,4,5.

164. For Maryland bridge fabrication you can use following alloys:

- 1) cobalt-chromium;
- 2) nickel-chromium;
- 3) gold;
- 4) palladium-silver.

Correct answer is:

- A. 1,2. B. 2,3. C. 3,4. D. 1,4. E. 2,4.

165. The most biologically neutral material contacting with mucosa under the pontic is:

- A. acrylic.
- B. ceramics.
- C. cobalt-chromium alloy.
- D. gold alloy.
- E. composite.

166. Which of the below-mentioned forces fixate upper mucosa-supported partial denture?

- 1) adhesion;
- 2) cohesion;
- 3) wedge;
- 4) muscle activity;
- 5) friction between denture base and artificial teeth;
- 6) gravity.

Correct answer is:

- A. 3,4,5,6. B. 1,2,3,4,5. C. 1,2,3,4. D. 1,2,3. E. 1,2.

- 167.** What consequences in finished partial denture may have using too thick acrylic dough?
- A. porous structure.
 - B. smudges.
 - C. occlusion increase.
 - D. significant polymerization shrinkage.
 - E. granulated base structure.
- 168.** Gaseous porosity in finished mucosa-supported partial denture is a result of:
- A. exceeding the temperature of 100.3°C during polymerization.
 - B. too quick cooling of the polymerization form.
 - C. incorrect proportions, using too much liquid.
 - D. incorrect proportions, using too much powder.
 - E. not sufficient amount of acrylic mass.
- 169.** Specify fundamental difference between direct and reverse flasking during mucosa-supported partial denture fabrication:
- A. compression molding in reverse method for 20 min 8-18 kG, in direct method for 60 min 40-50 kG.
 - B. scalding the wax in reverse method in water bath at 100°C for 3-4 min, in direct method at 60°C for 20-25 min .
 - C. in reverse technique teeth and external part of the denture are layered with plaster, forming a ridge, in direct method no.
 - D. in direct technique teeth and external part of the denture are layered with plaster, forming a ridge, in direct method no.
 - E. there is no difference between the methods.
- 170.** Mucosa-supported partial denture, which was fabricated with regard to parallelometric analysis of working model is:
- A. easily introduced, removed and fixated, does not require adjusting at handing out.
 - B. during adjustment and handing out it is once more analyzed.
 - C. parallelometric analysis is not performed in case of mucosa-supported partial denture.
 - D. harder to introduce and remove, due to the clasps being stronger and of lesser number.
 - E. it is also called muco-periosteal denture.
- 171.** Denture base of upper and lower mucosa-supported partial denture should:
- A. be distanced from abutment teeth, as to not traumatize periodontium.
 - B. be of 7 mm thickness.
 - C. in the area of own teeth, contact only with the highest protuberance of teeth and protrude in the area of undercuts by the value equal to the depth of those undercuts.
 - D. not contact with the highest protuberance of teeth.
 - E. fill the undercuts so that the close contact is achieved.

172. What impression tray should be used in the impression method according to Firtell, in fabrication of immediate dentures?

- A. one-piece individual tray.
- B. one-piece individual tray with occlusal ridges and standard tray.
- C. two-piece impression tray.
- D. standard impression tray.
- E. fox plate.

173. Indicate laboratory activities of reverse flasking and arrange them in appropriate order:

- 1) placing the model with mock up denture in plaster, in contra of polymerization form;
- 2) wax scalding;
- 3) introducing the acrylic dough to the form;
- 4) plaster surface isolation;
- 5) positioning the upper part of the flask and flooding the base with plaster;
- 6) placing the model with mock up denture in plaster in the base with plaster;
- 7) processing the finished denture;
- 8) long-term polymerization;
- 9) compression molding;
- 10) isolation of mucous part of the model;
- 11) layering the artificial teeth and external part of the mock up denture with plaster.

Correct answer is:

- A.** 1,4,5,2,10,3,9,8,7. **B.** 1,4,5,11,3,9,2,8,7. **C.** 6,10,4,5,2,3,9,8,7.
D. 6,11,5,4,3,9,8,2,7. **E.** 1,5,4,3,2,11,9,8,7.

174. Out of listed cast removable denture's clasp, choose rigid arms:

- 1) retentive;
- 2) guiding classically;
- 3) guiding actively;
- 4) stabilizing.

Correct answer is:

- A.** 1,2. **B.** 2,3. **C.** 3,4. **D.** 2,4. **E.** 1,3.

175. Indicate all combination of arms which form single clasp:

- 1) retentive and stabilizing arm;
- 2) retentive and actively guiding arm;
- 3) retentive and classically guiding arm;
- 4) classically guiding arm and actively guiding arm;
- 5) classically guiding arm and stabilizing arm;
- 6) 2 retentive arms;
- 7) 2 actively guiding arms;
- 8) 2 classically guiding arms.

Correct answer is:

- A.** 1,2,3,4. **B.** 3,4,5,6. **C.** 2,3,4,7. **D.** 4,5,7,8. **E.** 2,3,6,7.

176. Provide the characteristics of elasticity: retentive arm, actively guiding arm and classically guiding arm in cast removable denture:

- A.** retentive arm – resilient, actively guiding arm – resilient, classically guiding arm – rigid.
- B.** retentive arm – resilient, actively guiding arm – rigid, classically guiding arm – rigid.
- C.** retentive arm – rigid, actively guiding arm – resilient, classically guiding arm – resilient.
- D.** retentive arm – rigid, actively guiding arm – rigid, classically guiding arm – rigid.
- E.** retentive arm – resilient, actively guiding arm – resilient, classically guiding arm – resilient.

177. During parallellometric analysis, passively guiding surface was found, which is:

- A.** parallel to the analyzer.
- B.** upper angular surface.
- C.** undercut.
- D.** retentive surface.
- E.** lower angular surface.

178. Out of listed clasp surfaces choose the upper and lower angular ones:

- 1) retentive;
- 2) classically guiding;
- 3) actively guiding;
- 4) passively guiding;
- 5) stabilizing;
- 6) indirect;
- 7) introductory.

Correct answer is:

- A.** lower angular: 2,3,4; upper angular: 1,6.
- B.** lower angular: 1,7; upper angular: 2,4,5.
- C.** lower angular: 5,6,7; upper angular: 1,3.
- D.** lower angular: 1,3; upper angular: 2,5,7.
- E.** lower angular: 1,3; upper angular: 5,6,7.

179. Indicate true statements regarding designing and function of occlusal rest:

- 1) it is a metal independent pique coming out of the cast removable denture base or departing from the clasp arms towards the occlusal surface or incisal edge;
- 2) they are located on the vertical surfaces;
- 3) they prevent the extrusion of abutment teeth;
- 4) they shape the occlusal surface by rotated teeth;
- 5) they serve as indirect retainers
- 6) they support cast removable denture and prevent from its settlement.

Correct answer is:

- A.** all of the above-mentioned. **B.** 2,4,5,6. **C.** 1,3,4,5,6. **D.** 2,3,4,5. **E.** 1,2,6

- 180.** Supragingival retentive arm runs in the following way:
- A. from the gap of proximal zone to distal, undercut is in the distal zone.
 - B. from the gap of distal to proximal zone, undercut is in the proximal zone.
 - C. to the tooth surface only actual part of the arm adheres.
 - D. indirect part of the arm runs above the gingiva.
 - E. answers C and D are true.
- 181.** Indicate **false** statements regarding the preparation of the model during laboratory fabrication of cast removable denture:
- A. all undercuts or their parts, which surfaces are not used for retentive arms placement, are blocked with wax.
 - B. surface of wax on surfaces which are not used for retentive arms placement should be parallel to the introductory path.
 - C. area of retentive arm design, part of undercut is filled with wax to the level of upper margin of retentive margin and forms a margin.
 - D. margin formed by wax at the supragingival arms must be close to the border of undercut space.
 - E. margin formed by wax at the straight, recurrent and ring arms may be of any width.
- 182.** Modeling a metal cast of cast removable denture from casting wax is happening on the model:
- A. plaster (class II plaster).
 - B. epoxide.
 - C. agar material.
 - D. refractory die.
 - E. plaster (class IV plaster).
- 183.** Indicate **false** statements regarding the minor connectors in cast removable dentures:
- A. they must be rigid.
 - B. they must adhere to teeth on lower angular surfaces.
 - C. they can not act traumatically towards the periodontium.
 - D. they should be distanced from the periodontium by 0.2 to 0.7 mm.
 - E. they cannot form recesses for food in interdental spaces.
- 184.** Potential counterbalancing capacity of periodontium is used in the prosthetic treatment with partial removable dentures supported with:
- A. maximum reduction of denture base.
 - B. movable connection of retainers with denture.
 - C. location of retainers on oblique surfaces in order to direct the occlusal load.
 - D. using mostly large number of retainers with even distribution in dental arch.
 - E. distancing denture base from saved teeth to the distance of not more than 5 mm.

185. Indicate features characterizing designing the bridges in case of periodontopathy:

- 1) bilateral bridge;
- 2) unilateral bridge;
- 3) bridges of lowered pontic activity;
- 4) active bridges;
- 5) increasing the number of abutments in relation to the number of pontics;
- 6) decreasing the number of abutments in relation to the number of pontics;
- 7) splinting of residual teeth in anterior section with lateral sections of dental arch.

Correct answer is:

A. 1,3,5,7. **B.** 2,3,6,7. **C.** 1,4,6,7. **D.** 2,4,5,7. **E.** 2,4,6.

186. Products used for impregnation of retraction cords, which contain iron sulphate may impair the binding process of which materials:

- A.** polysulphide.
- B.** polyether.
- C.** silicone condensate.
- D.** silicone additive.
- E.** agar.

187. Prohibition of using latex gloves concerns working with:

- A.** C-silicone, due to the fact that sulphur released from the gloves' surface destroys platinum catalyst.
- B.** silicone impression materials of condensate binding, due to the fact that palladium released from the gloves' surface destroys tin caprylate.
- C.** polysulphide impression materials, due to the fact that sulphur released from the gloves' surface interacts with lead dioxide.
- D.** A-silicone, due to the fact that palladium released from the gloves' surface interacts with tin caprylate.
- E.** silicone impression materials of condensate binding, due to the fact that sulphur released from the gloves' surface destroys platinum catalyst.

188. Average value of Bennet's angle is:

- A.** 0° - 10° .
- B.** 10° - 20° .
- C.** 20° - 30° .
- D.** 30° - 40° .
- E.** 40° - 50° .

189. Which motion occurs during adduction of mandible in the lower part of TMJ:

- A.** sliding.
- B.** rotational.
- C.** sliding-rotational.
- D.** protrusive.
- E.** Bennet's.

- 190.** During lateral movement to the left, left condylar process in TMJ performs:
- A.** rotation along the horizontal axis and shifts towards the side and sometimes anteriorly .
 - B.** rotation along the horizontal axis and shifts medially and sometimes posteriorly.
 - C.** rotation along the vertical axis and shifts medially and sometimes anteriorly.
 - D.** rotation along the Frankfurt plane and shifts downward, to the side and sometimes posteriorly.
 - E.** rotation along the vertical axis and shifts towards the side and sometimes posteriorly.

191. Indicate which structure may constitute an abutment:

- 1) tooth;
- 2) root;
- 3) implant;
- 4) complete crown;
- 5) coronal post.

Correct answer is:

- A.** only 1. **B.** 1,2,3. **C.** 1,3. **D.** all of the above-mentioned. **E.** 4,5.

192. Large, vast bridge constructions may be subject to deformation. It may be prevented by using:

- A.** rectilinear course.
- B.** arched course.
- C.** narrowing the vestibulo-lingual dimension of pontic by $\frac{1}{2}$.
- D.** high cusps, deep fissures in pontic reconstruction.
- E.** active pontics.

193. One of basic principles of bridge designing is Ante's Law, which states the possibility of fabricating a bridge when the proportions are established:

- A.** periodontal membrane area of the abutment teeth to that of lost teeth.
- B.** surfaces of clinical crowns of abutment teeth to that of lost teeth.
- C.** height of clinical crowns of abutment teeth to the length of root part lost teeth.
- D.** periodontal membrane area of the abutment teeth to the length of root part lost teeth.
- E.** none of the answers is true.

194. Patient's of own teeth, bridge abutments, are subject, according to Dejak, to assessment of:

- 1) proportion of clinical crown height to the root length;
- 2) root configuration;
- 3) area of periodontal surface;
- 4) mutual distance;
- 5) correct location in occlusal plane.

Correct answer is:

- A.** all of the above-mentioned. **B.** only 1. **C.** 1,2. **D.** 1,2,3. **E.** 1,4,5.

195. Earlier preparation of alveolar process is required by pontic:

- 1) hygienic;
- 2) ridge lap;
- 3) modified ridge lap;
- 4) oval.

Correct answer is:

- A.** only 1. **B.** 2,3. **C.** only 4. **D.** all of the above-mentioned.
E. none of the above-mentioned.

196. Why is the saddle pontic not allowed in bridge planning?

- A.** it creates esthetic problems.
B. it inhibits phonetics.
C. it prevents from keeping proper hygiene under the pontic.
D. it does not protect the prosthetic field (deep undercut).
E. it is pressing against interdental papillae.

197. Principles of biomechanics indicate that the bending of the pontic is directly proportional to:

- A.** squared its height.
B. cubed its height.
C. squared its length.
D. cubed its length.
E. its length (linear dependency).

198. Preparation of abutments, in comparison to preparation for single crown, requires:

- A.** infragingival preparations.
B. gingival preparations.
C. obtaining appropriate degree of convergence of grinded walls, appropriate for each abutment.
D. obtaining appropriate degree of convergence of grinded walls, common for both abutments.
E. removal of bigger layer of tissue from abutments in case of bridge planning.

199. Benefits of prefabricated post and cores not containing metal, are:

- 1) possibility of removal of lesser amount of tooth tissues;
- 2) possibility of removal of higher amount of tooth tissues;
- 3) better esthetics;
- 4) better dentin adhesion, due to using adhesive cements;
- 5) better dentin adhesion, due to using traditional cements.

Correct answer is:

- A.** 1,3,5. **B.** 2,3. **C.** 1,4. **D.** 1,3,4. **E.** only 4.

200. Modulus of elasticity is most similar to values of dentin in case of posts:

- 1) metallic individual;
- 2) individual made of ceramics;
- 3) metallic standard;
- 4) standard made from fiber glass;
- 5) standard made from carbon.

Correct answer is:

A. 1,2. **B.** 3,4,5. **C.** 2,4. **D.** 4,5. **E.** only C.

201. First stage of preparing a tooth for post and core concerns preparation of the remainder of the coronal part of the tooth. Initial activities concern especially:

- 1) removal of the restorations and their remnants;
- 2) removal of caries and carious tissues;
- 3) shortening the incisal edge or occlusal surface;
- 4) removal of the excesses above the cervical area;
- 5) grinding the margin for future crown;
- 6) performing a radiogram.

Correct answer is:

A. all of the above-mentioned. **B.** 1,2. **C.** 1,2,3. **D.** 3,4,5. **E.** 1,6.

202. Ideal length of post and core in coronal part is a topic of many publications and discussions. At present, it is accepted that it should be:

- 1) 2/3 of the length of remaining root;
- 2) 1/2 of the length of remaining root (in case of teeth with tooth resorption);
- 3) it should not affect the 4mm of gutta-percha apically;
- 4) it concerns only straight course of the root;
- 5) at minimum – of the height of future crown.

Correct answer is:

A. 2,3,4,5. **B.** 1,3. **C.** 1,2,3,4. **D.** 1,2,3,5. **E.** 1,2,5.

203. The most beneficial stress distribution among all prefabricated posts, provide following posts:

- A.** tapered.
- B.** parallelepiped.
- C.** double tapered (double convergent).
- D.** threaded.
- E.** cut in apical part.

204. What can be used for removal of filling material from root canal (following radiogram examination):

- A.** heated endodontic spreader.
- B.** pesso bur.
- C.** Largo or Gates-Gliden bur.
- D.** tungsten carbide bur.
- E.** answers A,B and C are true.

205. Degree of alveolar process atrophy around the tooth, which is about to be used for post and core, may be at maximum:

- A. 25%.
- B. 30%.
- C. 50%.
- D. 75%.
- E. there can be no alveolar process atrophy present.

206. Leaving certain part of crown tissue during preparing a tooth for post and core and crown, gives the ferrule effect. Explain this name:

- 1) the effect of clamp, which means merging the walls;
- 2) it changes/improves the proportions of root to the coronal part;
- 3) it ensures better retention for the post;
- 4) it decreases the stress of tooth tissues, increases the resistance to fracture;
- 5) it prevents the wash out of core cement;
- 6) it improves the seal of posts and cores.

Correct answer is:

- A. all of the above-mentioned. B. 1,3,5. C. 2,4,6. D. 2,4,5. E. 3,5,6.

207. In order to achieve sufficient space on occlusal surface for material of metallic crown, it is accepted to lower the cusps:

- 1) 1.5 mm upper palatal;
- 2) 1.0 mm upper palatal;
- 3) 1.5 mm lower buccal;
- 4) 1.0 mm lower buccal;
- 5) 2.0 mm all;
- 6) 1.0 mm lower lingual and upper buccal.

Correct answer is:

- A. 1,3,6. B. 2,4,6. C. only 5. D. 1,4,6. E. 2,3,6.

208. The range of the crown in relation to gingiva may be: supra, infra and gingival. If we choose infragingival preparation, depth of grinding should be of:

- A. 0,2-0,5 mm.
- B. 0,5-1,0 mm.
- C. 1,2-1,5 mm.
- D. 1,5-2,0 mm.
- E. 2.0-2.5 mm.

209. Clinical problem of complex metallic-ceramic crowns is achieving permanent link between ceramics and metal alloy. Quality of this connection is dependent on:

- 1) presence of micro retentive depressions on metal;
- 2) presence of macro retentive depressions on metal;
- 3) presence of oxide layer after the oxidation process of metal coping;
- 4) thickness of metal veneering layer;
- 5) difference of contractility between materials layer (metal/ceramics).

Correct answer is:

- A. all of the above-mentioned. B. 1,3,4,5. C. 1,3,4. D. 1,3,5. E. 2,3,5.

210. In order to ensure the integrity of metal coping during multiple firing of ceramics, it is required to absolutely maintain the difference in melting temperatures of alloy and ceramics. The alloy melting temperature is to be higher than the ceramics, and the difference between them is:

- A. 50-100°C.
- B. 100-150°C.
- C. 150-200°C.
- D. 200-250°C.
- E. 250-300°C.

211. Choose true statements regarding the preparation of teeth in anterior section for a crown veneered with ceramics:

- 1) remove even layer of around 1.0mm of tissue from each surface;
- 2) one-dimensionally 1.2-1.5mm from labial surface;
- 3) one-dimensionally 0.6-0.8mm from palatal surface;
- 4) two- dimensionally 1.2-1.5mm from labial surface;
- 5) two- dimensionally 0.6-0.8mm from palatal surface;
- 6) two- dimensionally from palatal surface, but the amount of removed tissue in each place depends on the range of veneering;
- 7) proximal surfaces are prepared in ½ labial part.

Correct answer is:

- A. 1,7. B. 2,3. C. 3,4. D. 4,5. E. 4,6.

212. Indicate true statements regarding the neutral zone:

- 1) it is a potential space for complete denture;
- 2) it forms after extraction of all teeth and alveolar processes atrophy;
- 3) it constitutes an artificially created part of stomatognathic system;
- 4) it was described for the first time by Fish;
- 5) it is limited from above by maxilla and soft palate, by mandible and oral cavity floor by below, internally by tongue, externally by lips and cheeks;
- 6) it is a space of oral cavity, in which the lingual forces outweigh the forces of cheeks and lips.

Correct answer is:

- A. 1,2,3,4. B. 2,3,4,5. C. 1,2,4,5. D. 1,4,5,6. E. 1,2,5,6.

213. Anatomical impression in case of fabricating complete dentures is considered:

- 1) an initial impression;
- 2) it is used for fabrication of individual tray;
- 3) always a working impression;
- 4) it is taken on standard tray;
- 5) it is taken on individual tray.

Correct answer is:

- A. 1,2,4. B. 1,2. C. 3,5. D. 1,4. E. 1,5.

214. Functional impressions include the impression of:

- A. Herbst.
- B. Kozłowski and Herbst.
- C. Marxkors and Płonka.
- D. Płonka and Herbst.
- E. Kozłowski, Marxkors and Płonka.

215. During functional impression according to Kozłowski, following steps are performed:

- 1) marking the relieving areas on the initial cast and covering them with a thin layer of plaster;
- 2) anatomical impression;
- 3) marking the relieving areas on the mucous membrane;
- 4) casting the initial model;
- 5) fabrication of the individual impression tray;
- 6) taking the functional impression with impression paste followed by its assessment;
- 7) applying the impression paste and pressing it hard against the basal seat area;
- 8) introduction of the impression tray into patient's mouth in order to copy the relieving areas, followed by removal of impression material from the relieving areas and perforating the impression tray with the bur.

Correct answer is:

- A.** 1,2,3,4,5,6,7,8. **B.** 2,4,1,8,5,6,3,7. **C.** 2,4,1,5,6,3,8,7.
D. 2,4,1,5,6,3,7,8. **E.** 2,4,1,6,5,3,7,8.

216. One of the steps of taking functional impression according to Marxkors, is functional shaping of the margins. In order to do so:

- A.** applying Xantropren-Function impression material on the margins of upper tray and functional shaping of the margins in the presence of lower tray (without impression material).
- B.** applying Xantropren-Function impression material on the whole surface of lower tray and functional shaping of the margins in the presence of upper tray (without impression material).
- C.** both impression trays (upper and lower) after applying Xantropren-Function impression material are inserted simultaneously and patient is asked to perform functional movements.
- D.** roll made with Xantropren-Function impression material is fixed to the posterior border of upper tray and patient is asked to perform functional movements to seal the A-H line.
- E.** fluid Xantropren-Function impression material is applied only on upper tray and patient is asked to perform functional movements.

217. Common reason for dropping off the individual tray is tension of pterygomandibular ligament. To prevent this, it is necessary to correct the tray in the area of:

- A.** only first molar.
- B.** beyond the maxillary tuberosity.
- C.** vestibularly from the second to first premolar.
- D.** labially from canine to canine.
- E.** lingually from retromolar triangles to the area of first molars.

- 218.** Functional impressions may be divided into mucostatic and mucodynamic. Mucostatic impressions involve:
- A.** area covered with movable mucosa.
 - B.** area covered with movable and immobile mucosa.
 - C.** area covered with immobile mucosa.
 - D.** only adipose zone according to Lund.
 - E.** only glandular zone according to Lund.
- 219.** For establishing the position of occlusal plane, you would use:
- A.** Fox device.
 - B.** Ivanson device.
 - C.** Willis device.
 - D.** calipers and wax knife.
 - E.** Camper device.
- 220.** During teeth alignment according to the theory of cusp articulation according to Gyzi, it is necessary to:
- A.** obtaining bilaterally balanced occlusion, with elimination of Christensen phenomenon.
 - B.** obtaining unilateral balanced occlusion, with maintaining Christensen phenomenon.
 - C.** obtaining bilaterally balanced occlusion, with maintaining Christensen phenomenon.
 - D.** obtaining unbalanced occlusion, with elimination of Christensen phenomenon
 - E.** only obtaining unilateral balanced occlusion, and elimination or maintaining. Christensen phenomenon does not have significant importance.
- 221.** Prosthetic stomatopathies (so called symptomatic) develop:
- 1) in the course of certain diseases of cardiovascular system;
 - 2) in patients with immunodeficiency, where the denture constitutes additional irritant of oral mucosa;
 - 3) only in patients with poor hygiene;
 - 4) in case of salivary secretion disorders, for example xerostomia;
 - 5) only in patients who use immediate dentures.
- Correct answer is:
- A.** 3,4,5. **B.** 1,2,5. **C.** 1,2,4. **D.** 2,3,5. **E.** all of the above-mentioned.
- 222.** One of the reasons of prosthetic stomatopathies is the influence of denture material, which acts against the mucosa in the place of direct contact. Occurrence and intensity of mucosa inflammation involved with denture base is:
- A.** inversely proportional to the amount of free monomer after its polymerization.
 - B.** irrelevant of the amount of free monomer after its polymerization.
 - C.** inversely proportional to the amount of free monomer after its polymerization and to the amount of dye used.
 - D.** inversely proportional to the amount of free monomer after its polymerization and directly proportional to the amount of dye used.
 - E.** directly proportional to the amount of free monomer after its polymerization.

- 223.** Diffused mucositis of palate and alveolar processes, overlapping with denture base, characterized by loosening, petechial hemorrhaging and mobility against the surface. This description is concerns:
- A.** biologic changes of the aging system.
 - B.** clinical image of prosthetic stomatopathy – chronic inflammation.
 - C.** prosthetic base of type III edentulous oral cavity according to Supple.
 - D.** clinical image of prosthetic stomatopathy – acute inflammation.
 - E.** answers A and B are true.
- 224.** Stomatitis hyperplastica palati occurs in the form of:
- A.** pedicled connective tissue lesion of various sizes, soft or hard consistency, dangling from the hard palate in the form of granulation flap.
 - B.** excessive hyperkeratosis of epithelium, of leukokeratosis type, located on the mucosa of hard palate.
 - C.** single or multiple papillomatous hyperplasia of the mucosa of hard palate, resembling raspberry fruit.
 - D.** fibrous hyperplasia of the mucosa of hard palate due to bone atrophy.
 - E.** growth of disc type with crevices and erosions, on circumference of which inflammatory rim forms.
- 225.** Treatment of prosthetic stomatopathies in the form of hyperplastic mucosa, apart from pharmacologic management, is performed with surgical removal. Post-surgery, previously used denture is relined with soft regenerative material for the period of:
- A.** 5 days.
 - B.** 7 days.
 - C.** 14 days.
 - D.** 21 days.
 - E.** 1 month.
- 226.** Indications for fabrication of immediate dentures include:
- 1) necessity to extract teeth and fabrication of long-term denture;
 - 2) gradual teeth extraction;
 - 3) economic reasons;
 - 4) patients in poor health conditions;
 - 5) temporary providing the patients, qualified for treatment, with cast removable dentures.
- Correct answer is:
- A.** 1,2,5. **B.** 3,4,5. **C.** 1,3,5. **D.** 2,3,4. **E.** 1,4,5.
- 227.** Impressions consisting of immediate dentures with the use of individual two-part tray was proposed by:
- A.** Campagna.
 - B.** Firtell.
 - C.** Spiechowicz.
 - D.** Reichenbach.
 - E.** Płonka.

- 228.** According to the timeline of control visits, after handing out the immediate dentures, relining of the denture with direct method may be performed at the earliest on:
- A. I visit after 7 days.
 - B. II visit after 2-3 days.
 - C. II visit after 2 weeks.
 - D. III visits after 3 weeks.
 - E. III visits after 3 months.
- 229.** Main differentiating feature of immediate dentures fabrication from other removable dentures is:
- A. inspecting prepared occlusal rims.
 - B. necessity of appropriate preparation of plaster model.
 - C. alignment of teeth in the location of present gaps.
 - D. appropriate adjusting of denture base.
 - E. necessity for individual tray fabrication.
- 230.** In complex impression used for immediate dentures according to Spiechowicz method, impression from the vestibular side is taken with the use of:
- A. silicone impression material on standard tray.
 - B. silicone impression material on individual two-part tray.
 - C. impression paste on standard tray.
 - D. impression plaster on individual two-part tray.
 - E. impression plaster added from the vestibular side.
- 231.** Impression consisting of immediate dentures with the use of individual trays with occlusal rims:
- A. it is taken with mouth closed.
 - B. it requires the use of plaster impression.
 - C. it was proposed by Marxkors.
 - D. it is taken with mouth open.
 - E. it does not require functional margin shaping.
- 232.** The extent of alveolar process reduction on plaster model depends on the periodontium condition in the area of extracted teeth. In a situation where periodontal problems are not the cause of extraction, plaster teeth should be cut to the necks, followed by performing a depression of 1-3mm with a mill and smoothing out the edges. It is a method developed by:
- A. Spiechowicz.
 - B. Reichenbach.
 - C. Płonka.
 - D. Campagna.
 - E. Firtell.
- 233.** Individual tray for partial loss should involve:
- A. only the edentulous parts of prosthetic basal area.
 - B. edentulous parts of prosthetic basal area and vestibular side of residual dentition.
 - C. edentulous parts of prosthetic basal area and lingual side of residual dentition.
 - D. only residual dentition.
 - E. in partial losses individual trays are not fabricated.

- 234.** One of the forces which fixates the mucosa-supported denture on the basal area, which does not occur in case of complete dentures, is the force of:
- A. adhesion.
 - B. wedge.
 - C. gravity.
 - D. intersurface tension.
 - E. cohesion.

235. Indicate factors determining occlusion:

- 1) referential/treatment position of the mandible;
- 2) height of occlusion;
- 3) occlusal plane/compensative curves/height and angles of inclination of lateral teeth cusps;
- 4) palatal surface of upper incisors/incisal guidance;
- 5) angles of inclination of palatal surface of the canine (canine guidance).

Correct answer is:

- A. 1,3. B. 2,3,4. C. 1,2,5. D. 1,2,4. E. all of the above-mentioned.

236. Indicate true statement regarding Spee line:

- A. it runs in horizontal plane.
- B. it runs in frontal plane.
- C. it constitutes a piece of circle which centre is located in the area of Glabella.
- D. mean value of Spee line radius is of around 84 mm.
- E. value of Spee line radius depends on the squared distance of occlusal plane to infraorbital plane.

237. Modification of occlusal height of +1mm in the area of mandibular incisors causes shifting on the condyle in TMJ of the value of:

- A. +0.1 mm.
- B. +0.2 mm.
- C. +1 mm.
- D. +2 mm.
- E. +1 cm.

238. Indicate true statements regarding the masseter:

- 1) it is a strong muscle adducting the mandible;
- 2) in unilateral action it rotates the mandible slightly externally, ipsilaterally;
- 3) in unilateral action it rotates the mandible slightly internally, ipsilaterally;
- 4) in unilateral action it rotates the mandible slightly externally, contralaterally;
- 5) it is innervated by the lateral pterygoid nerve.

Correct answer is:

- A. tylko 1. B. 1,2. C. 1,3. D. 1,4. E. 4,5.

- 239.** Considering the action of masticatory force on mandible, it may be compared to lever:
- A. unilateral I class.
 - B. unilateral III class.
 - C. bilateral I class.
 - D. bilateral III class.
 - E. answers A and D are true.

240. Axial loading of teeth may be achieved through contact:

- 1) cusp – flat surface;
- 2) 3-point contact;
- 3) fissure-fissure;
- 4) tete-a-tete;
- 5) marginal strip-fissure.

Correct answer is:

- A. 1,2. B. 1,2,3. C. 4,5. D. 1,2,5. E. 2,3,4.

241. Arbitrarily established pivot point axis of TMJs is located:

- A. 3 cm anteriorly from the auricular meatus.
- B. directly in the medial point of ear tragus.
- C. 5 mm below and 13 mm anteriorly from the posterior border of ear tragus on the line ear tragus-lateral angle of the eye.
- D. on the peak of zygomatic bone protuberance.
- E. none of the above-mentioned.

242. Intraoral registration of mandible movement:

- 1) is possible with the use of function graph;
- 2) allows for outlining the gothic arch;
- 3) allows for analysis of mandible movement;
- 4) allows for direct analysis of condylar processes;
- 5) allows for registration of referential position in central relation.

Correct answer is:

- A. 1,2,3. B. 3,4,5. C. 2,3,4,5. D. 1,2,4,5. E. 1,2,3,5.

243. Indicate **false** statement:

- A. in maximum intercuspitation of both dental arches, traces of transfer print allow for assessment of axial loading of lateral teeth.
- B. correct point contacts should occur in the area of cusp peaks.
- C. correct point contacts should occur in the area of central fissures.
- D. correct point contacts should occur in the area of marginal strip.
- E. correct point contacts should occur in the area of cusp slope.

244. Indicate factors that influence the determination of occlusal height:

- 1) osseous structure of facial part of the skull;
- 2) esthetic factors;
- 3) phonetic factors;
- 4) swallowing;
- 5) the range of condylar processes movement in central relation.

Correct answer is:

- A. 1,3,5. B. 2,4,5. C. only 1. D. 3,4,5. E. all of the above-mentioned.

245. Average time of contact of teeth in single mastication cycle is around:

- A. 0.2 sec.
- B. 2 sec.
- C. 1.5 min.
- D. 5 min.
- E. 17 min.

246. Occlusal pattern called mutually protected articulation:

- 1) it assumes increase of adductors activity in lateral movements;
- 2) elimination of horizontal forces in the area of lateral teeth;
- 3) elimination of vertical forces in the area of lateral teeth;
- 4) it allows for vertical teeth loading;
- 5) from clinical point of view, it is easy to replicate in prosthetic reconstructions.

Correct answer is:

- A. 2,3,5. B. 1,3,5. C. 2,4,5. D. 1,2,4,5. E. 1,2,3.

247. Shimstock foil allows for:

- A. registration of the position of central relation.
- B. registration of centric slide.
- C. detection of contacts disrupting the mandible guiding.
- D. answers A and B are true.
- E. answers A, B and C are true.

248. Hypothetic spheric surface outlined in the frontal plane in order to reconstruct the occlusion, connecting the buccal and lingual homonymous cusps of teeth on the left and right side is known as the line of:

- A. Spee.
- B. Wilson (Monson).
- C. Fehr.
- D. Balkwill.
- E. Bonwill.

249. Articular surfaces and articular disc of TMJ are built with:

- A. fibrous cartilage.
- B. vitreous cartilage.
- C. brown tissue.
- D. Syndesmosis.
- E. osseous tissue.

250. Indicate correct statements regarding innervation of TMJ:

- 1) it derives from auricotemporal nerve;
- 2) it derives from the V3 branch of trigeminal nerve;
- 3) it derives from masseteric nerve and posterior deep in the anterior part of the joint;
- 4) it is larger in posterior lateral part of the joint than in anterior or medial part;
- 5) it does not occur in central part of the disc and articular cartilage.

Correct answer is:

- A. 1,3,5. B. 2,4. C. 2,3,4,5. D. 4,5. E. all of the above-mentioned.

251. Direct retainers include:

- A. occlusal rests.
- B. major connector.
- C. denture base.
- D. clasps and precise elements.
- E. elements of minor connectors.

252. Retentive mesh used for anchorage of denture base include:

- A. major connectors.
- B. minor connectors.
- C. indirect retainers.
- D. direct retainers.
- E. precise elements.

253. Metal pique sized 1.5x2 mm, deriving from the connector of clasp, resting directly on abutment is:

- A. coronal post.
- B. minor connector.
- C. continuous clasp.
- D. indirect retainer.
- E. occlusal rest.

254. If in the stage of trying metal cast in oral cavity, patient reports teeth pain and feeling of increased tension, such situation is caused by:

- A. pearls of metal located on dental surfaces of metal, which were not removed during the preparation.
- B. damage of teeth on working or secondary model.
- C. alginate impression deformation.
- D. decrease of cast size due to only partial compensation of alloy shrinkage.
- E. all of the above-mentioned.

255. What can be attached to the clamp holder of vertical arm of parallelometer:

- A. analyzer.
- B. stylus.
- C. measuring plate.
- D. knife for removal of excessive wax blocking the undercuts.
- E. all of the above-mentioned.

256. It is an inferioangular surface, in relation to which guidance involving half of tooth's surface occurs. This description concerns:

- A. undercut.
- B. actively guiding surface.
- C. retentive surface.
- D. indirect surface.
- E. classically guiding surface.

257. First and foremost stage of parallelometric analysis is:

- A. finding the indirect and introductory surfaces.
- B. finding the classically guiding surfaces.
- C. finding the retentive and guiding surfaces.
- D. examination of the quality of found surfaces.
- E. examination of inclination of lateral surfaces of alveolar process.

258. Clasp, which comprises of two arms, involves the tooth crown from the lingual and vestibular side is called:

- A. embrasure.
- B. ring.
- C. simple.
- D. single.
- E. back-action.

259. One of the features of exemplary introductory path is for the retentive arms to have the so-called directional fixating function. It means that:

- A. the end of the true part of the retentive arm should be directed towards the denture base, which according to anticipation is most vulnerable to being detached from the surface, especially in partial unbounded edentulous losses or vast interdental in anterior section.
- B. the end of the true part of the retentive arm should be directed towards the residual teeth.
- C. the end of the true part of the retentive arm should be directed either towards the denture base or the residual teeth, which is related to the anatomy of tooth, on which the arm was designed.
- D. it does not matter, towards which side is the retentive arm directed, as denture retention depends on depth on which the position of said arm was designed on retentive surface.
- E. none of the above-mentioned information does not describe the function of retentive arm.

260. Indicate true statement regarding the distal rigid rest of cast removable dentures:

- 1) the rest is located on second or subsequent tooth from the gap;
- 2) the rest is located on occlusal surface of the tooth in I area;
- 3) the rest is located on the tooth adjacent to the gap in II area;
- 4) it is designed in unbounded edentulous gaps;
- 5) it is designed in small interdental gaps;
- 6) in unbounded edentulous they act as indirect retainers;
- 7) they retain the denture in chosen direction of introductory path;
- 8) in some cases, they widen the retaining surface of the denture and allow for the course of clasp line in its area.

Correct answer is:

- A.** 2,4,7,8. **B.** 3,5,7,8. **C.** 1,4,6,8. **D.** 1,5,6,7. **E.** 2,5,7,8.

261. In designing major connector in cast removable denture with existing prominent palatine torus, you would use:

- A. palatal strap.
- B. anterior-posterior strap.
- C. plate-type connector.
- D. modified plate-type connector.
- E. bar retainer.

262. Morphologic-functional changes in edentulous patients include:

- 1) collapsed cheeks and lips, drooping mouth corners;
- 2) atrophy in maxillary slope of alveolar process directed outwards;
- 3) reduction of muscle tension;
- 4) enhancement of articular tuberculae, deepening of articular surfaces, condyle of mandible are shifted anteriorly;
- 5) less vascularized mucosa, healing and regeneration is impaired;
- 6) increase of salivary secretion;
- 7) compensatory hyperplasia of the tongue.

Correct answer is:

- A. 1,2,5. B. 3,4,5,6. C. 1,3,5,7. D. 2,3,7. E. 4,5,6,7.

263. Indicate true statements regarding classification of Suple:

- A. type I hard palate is highly vaulted.
- B. type II hard palate is flat.
- C. type III hard palate is less or more vaulted.
- D. answers A,B and C are true.
- E. answers A,B and C false.

264. Individual tray made in order to fabricate complete upper denture:

- A. its range should not exceed the border of movable mucosa.
- B. its range should exceed the border of movable mucosa in significant atrophies.
- C. the base should not reach the border of movable mucosa in well-preserved alveolar processes (3-4 mm).
- D. answers A,B and C false.
- E. answers A,B and C are true.

265. If the impression is taken with chemically cured material, individual tray should be made of:

- A. acrylic.
- B. light-cured materials.
- C. thermoplastic materials formed in a device such as Erkopress, Erkoform.
- D. shellac.
- E. all of the above-mentioned.

- 266.** During individual tray testing with Herbst tests, it is shifting during wide mouth opening. Its range needs to be corrected:
- A. vestibularly from canine to canine.
 - B. bilaterally in the area of maxillary tuberosity to the second molar.
 - C. vestibularly in the area of incisal folds.
 - D. bilaterally from the second molar to the first premolar.
 - E. bilaterally vestibularly from the retromolar triangle to the area of first molars.
- 267.** The range of maximum mandible movements in the projection to sagittal plane describes:
- A. gothic arch graph.
 - B. Posselt diagram.
 - C. Bonvill triangle.
 - D. Balkwill triangle.
 - E. Spee line.
- 268.** Active methods of adopting the central mandible position by the patient during the phase of central occlusion establishing include:
- 1) swallowing method;
 - 2) opening and closing of the mouth repeated multiple times;
 - 3) smiling with rims closing;
 - 4) reaching the posterior border of the base or upper rim with the tip of the tongue;
 - 5) mandible adduction with head tilted back;
 - 6) delicate pressure of the dentist on the chin;
 - 7) delicate pressure of the dentist on the area of second premolars;
 - 8) Dowson manipulation.
- Correct answer is:
- A.** 1,3,5,6. **B.** 2,4,6. **C.** 1,2,4,8. **D.** 1,2,3,4,5. **E.** 5,6,7,8.
- 269.** In artificial dentition of complete dentures:
- A. it is necessary to increase the number of occlusal contact points on the occlusal surfaces of upper and lower arch.
 - B. tri-point contact is a minimum, with a tendency to multipoint contacts transforming into planar contacts.
 - C. it is necessary to establish bilaterally balanced occlusion.
 - D. answers A, B and C are true.
 - E. answers A, B are true.
- 270.** The description of alignment of artificial tooth according to Gysi: incisal cusp adheres to the occlusal plane, lateral mandible deviation with respect to sagittal plane, labial surface is parallel to the frontal plane. Such description concerns:
- A. lower canine.
 - B. first upper premolar.
 - C. upper canine.
 - D. first lower premolar.
 - E. upper lateral incisor.

271. Indicate activator of polyvinylsiloxane materials:

- A. chloroplatinate acid.
- B. polyhydrogen acid.
- C. hydrogen siloxane.
- D. vinylsiloxane.
- E. polymethyl vinyl silane.

272. Indicate true statement regarding the use of innovative transparent silicone materials:

- A. they are used in two phase impression method during implantation.
- B. they are used for fabrication of relaxation splints as the first layer.
- C. they are used for fabrication of forms intended for direct esthetic restorations.
- D. they are used for fabrication of forms intended for direct and indirect esthetic restorations.
- E. none of the above-mentioned.

273. Methods of mixing the elastomer materials include:

- 1) manual mixing;
- 2) static automatic mixing;
- 3) dynamic automatic mixing;
- 4) hygroscopic mixing;
- 5) hyperbaric mixing.

Correct answer is:

- A. 1,2,3. B. only 5. C. only 3. D. 1,5. E. 2,3,4.

274. Polyether impression materials used in impressions for fixed restorations, include in their base:

- A. polyether copolymer, silicate filler, plasticizer, triglycerides.
- B. sulphonic acid ester.
- C. tin caprylate, sulphonic acid ester.
- D. tin caprylate.
- E. polyether copolymer, sulphonic acid ester, triglycerides.

275. Silicone additive materials release hydrogen during binding, that is why casting working model:

- A. should be performed immediately after the release of the impression.
- B. it does not matter.
- C. should be performed not earlier than 30 min after.
- D. it should be cast up to 20 min.
- E. these materials do not release hydrogen.

276. VPES impression materials are characterized by:

- 1) no by-products;
- 2) high hydrophily;
- 3) possibility of casting multiple models;
- 4) mass liquidity;
- 5) double-snap effect.

Correct answer is:

- A. only 5. B. 2,5. C. 1,3,4. D. 1,2,3. E. all of the above-mentioned.

- 277.** In retraction using “two cord” method, significant role is played by:
- A.** inserting the smaller diameter cord into the bottom of the pocket, followed by wider cord.
 - B.** inserting the smaller diameter cord into the bottom of the pocket. followed by the same size cord.
 - C.** inserting the smaller diameter cord into the bottom of the pocket, followed by wider cord which is removed after injection with light body.
 - D.** inserting the smaller diameter cord into the bottom of the pocket, followed by wider cord and both are removed after injection with light body.
 - E.** inserting the larger diameter cord into the bottom of the pocket, followed by smaller cord which is removed after injection with light body.

278. During taking an impression with PE impression material, it is necessary to remember:

- 1) cords soaked with iron sulfate should not be used for retraction;
- 2) using individual trays;
- 3) possibility of allergic reactions;
- 4) rigidity of the material, which impairs the release of impression from oral cavity;
- 5) storing the impressions in water vapor.

Correct answer is:

- A.** only 5. **B.** 1,2,3,4. **C.** 1,2,3. **D.** 1,5. **E.** 4,5.

279. Active substances in hemostatic products used for retraction include:

- 1) aluminum chloride solution, from 10% to 20%;
- 2) epinephrine solution 0.1%;
- 3) iron sulfate solution;
- 4) aluminum chloride;
- 5) oxyquinoline.

Correct answer is:

- A.** 1,5. **B.** 1,2,3,4. **C.** all of the above-mentioned. **D.** 1,3,4,5. **E.** only 4.

280. Indicate true statements regarding the zircon oxide (IV):

- 1) it is in the form of blocks used for milling in CAD/CAM technology;
- 2) it is in the form of two variations: monoclinic, below the temperature of 1170°C and pyramidal, in the temperature range of 1170°C-2370°C;
- 3) blocks used for milling are stabilized with oxides: yttrium, calcium, magnesium, cerium, chromium;
- 4) they undergo sinterization, which leads to reduction of intercrystallite space and takes place in the temperature of 1600°C-1700°C;
- 5) abbreviation 3Y-TZP applies – where 3Y speaks about 3% weight of yttrium oxide contained in ceramics material.

Correct answer is:

- A.** 1,2. **B.** 2,3. **C.** 3,4. **D.** 1,4. **E.** 1,5.

- 281.** Indicate true statements regarding preparation of restorations made out of zircon oxide:
- A.** preparation of restorations made out of zircon oxide are made with fine-grained burs air-cooled, due to the risk of overheating the material.
 - B.** use of coarse-grained burns causes scratches and accelerates the transformation of pyramidal to monoclinic phase.
 - C.** overheating causes the consolidation of height and linear changes of ceramics crystals.
 - D.** use of coarse-grained burns restricts the overheating effect and protects against the chipping of veneering ceramics.
 - E.** we minimize the pressure and reduce the amount of water in order to avoid the fracturing of zircon structure.

- 282.** Crowns uniformly ceramic are fabricated with the use of various technologies. Indicate a method, which **is not** used:
- A.** sintering the ceramics on bars from refractory die.
 - B.** firing the ceramics on platin foil.
 - C.** pressing the ceramics under pressure.
 - D.** processing the ceramics in CAD/CAM technology.
 - E.** sintering the oxide aluminum ceramics in single casting melting pots.

- 283.** Indicate true statements regarding initially baked prefabricates of leucite ceramics, lithium disilicate or zircon, in the form of ingots processed in pressing technology:
- 1) ingots are available in a wide color range of varied stage of transparency and translucency;
 - 2) ingots may be in polychromatic form of varied color gradation;
 - 3) ceramics pressing begins with heating the melting pot in induction furnace;
 - 4) ceramics is pressed after its heating up to the temperature of 1180°C;
 - 5) pressing form for ceramics pressing is made in the cut-back method;
 - 6) one of the methods of preparation of restoration made in pressing technology is layer technique;
 - 7) in this technology following restorations can be fabricated: veneers, crowns, endocrowns, bridges with pontic up to 11mm in lateral section up to first molar.

Correct answer is:

- A.** 1,5. **B.** 2,3 **C.** 4,8. **D.** 6,7 **E.** 2,7.

- 284.** Indicate true statements regarding the percussion test:
- A.** it is helpful in estimation of anterior hyper occlusion.
 - B.** it is performed with stethoscope.
 - C.** it assesses the balanced occlusion in the area of lateral teeth.
 - D.** it facilitates the estimation of occlusion in posterior occlusal position with articulation paper.
 - E.** the test is always negative in normal occlusal relations (balanced occlusion), due to the fact that we do not observe contact in anterior teeth.

285. In order to assess the TMJ various test and functional manipulations are used. One of them is resiliency test. Indicate true statements regarding this test:

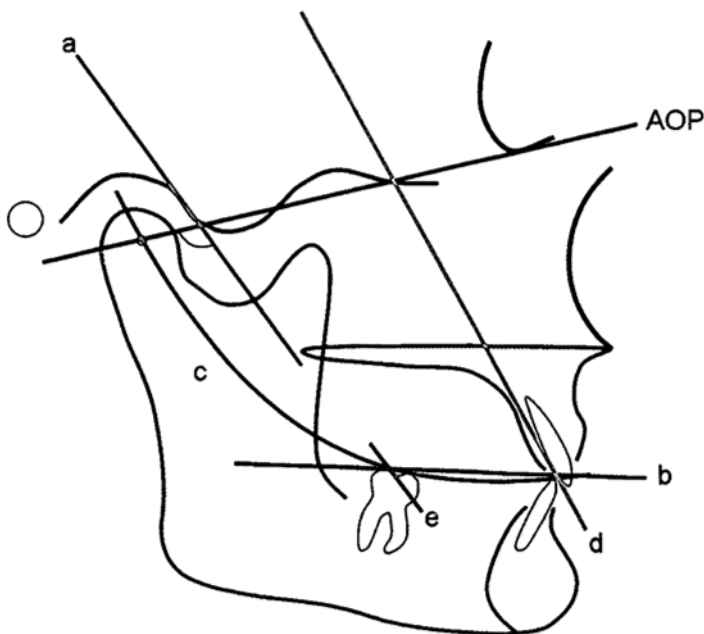
- 1) thank to resiliency test we may assess the compression or distraction of articular gap with an accuracy of 0.1 mm;
- 2) resiliency test is performed with the use of articulation paper of 100 μm ;
- 3) resiliency test is performed with the use of articulation foil of 60 μm ;
- 4) resiliency test is performed by placing the tin foil of 0,3 mm thickness, which prevents the occlusal contact on opposite side and holding the foil of 21 μm thickness during clenching the teeth in maximum intercuspal contact;
- 5) this test is always negative in normal occlusal conditions thank to the estasticity of TMJ tissues.

Correct answer is:

A. 1,2. **B.** 2,4. **C.** 4,5. **D.** 3,5. **E.** 1,6.

286. The illustration presents occlusal determinants. One of the posterior determinants is presented by line:

- A.** a.
- B.** b.
- C.** c.
- D.** d.
- E.** e.

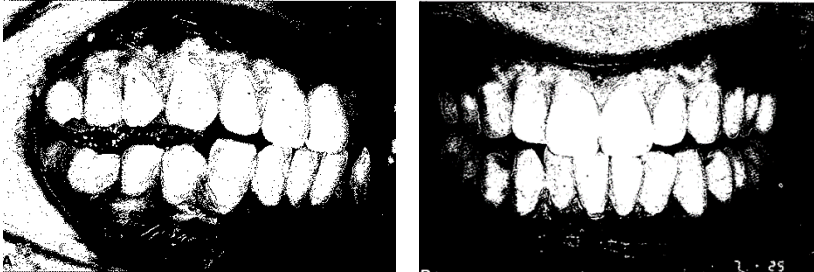


287. In order to perform correct analysis of occlusal conditions and designing occlusion reconstruction referential mandible position should be found and registered. Techniques for referential mandible position registration **do not** include:

- A.** performing registry of central occlusion with mapping the gothic arch.
- B.** performing registry of lateral occlusion with oblique bite-on rim.
- C.** performing registry with the use upper plate with bite-on rim.
- D.** performing registry of anterior with oblique wax plate.
- E.** performing wax occlusion registry from hard model wax.

288. Illustrations 1 and 2 present:

- A. method of vertical and horizontal bite registration.
- B. centric slide assessment method.
- C. method of asymmetric centric slide registry.
- D. method of Benet angle assessment.
- E. they present Christensen phenomenon.



289. Metal crowns may be made of:

- A. gold alloys.
- B. silver-palladium alloys.
- C. cobalt-chromium and nickel-chromium alloys.
- D. titanium alloys.
- E. all of the above-mentioned.

290. Indicate true statements regarding galvanofforming technology:

- 1) it is a process of electrolysis;
- 2) thin-walled structures (0.2mm) are obtained;
- 3) fusing the veneered layer with monometal takes place through oxidative layer;
- 4) iron sulfate is an electrolyte
- 5) there is a risk of discoloration of the veneering layer.

Correct answer is:

- A. all of the above-mentioned. B. 1,2,3. C. 1,2,3,4. D. 3,5. E. 1,2,4.

291. Processing the materials difficult to machine, of complicated geometrical shapes, which cannot be obtained with traditional preparation of metals, can be performed in following technology:

- A. CAD/CAM.
- B. SML.
- C. SLS.
- D. electrospark.
- E. galvanofforming.

292. Metal alloys described also as substitute gold alloys are:

- A. Cr-Co alloys.
- B. Cr-Ni alloys.
- C. Ag-Pd alloys.
- D. titanium alloys.
- E. Wippl's steel.

293. Marginal seal of metal crown is of around:

- A. 15-20 μm .
- B. 25-35 μm .
- C. 25-50 μm .
- D. 50-100 μm .
- E. 100-200 μm .

294. Layer of ceramics responsible for fusing metal-ceramics is:

- A. opaquer layer.
- B. dentine layer.
- C. enamel layer.
- D. margin type ceramics.
- E. enamel-like glaze.

295. Layer of varnish which constitutes isolation of plaster remnant during the fabrication of metal coping of complex crown, creates the space for cement in the size of:

- A. 5-10 μm .
- B. 10-15 μm .
- C. 15-25 μm .
- D. 20-35 μm .
- E. 35-45 μm .

296. Indicate true statements:

- 1) the thickness of metal coping in metal-porcelain crowns is od 0.3 to 0.4mm for non-precious alloys and 0.2 mm for precious alloys;
- 2) complex crown veneered with low-melting porcelain (850-1050⁰C);
- 3) during modelling of the metal-porcelain crown, emergence angle should be of 0-15⁰;
- 4) in fabrication of metal-porcelain crowns in the lab, complex model cast from class III and class II plaster (base);
- 5) oxidation is the process during which a layer of oxides is formed, which is responsible for the fusion of gold coping with veneering ceramics.

Correct answer is:

- A.** only 1. **B.** 1,2,3,5. **C.** 3,4,5. **D.** 2,3. **E.** none of the above-mentioned.

297. Presence of air in casting form, due to the lack of venting canals or mixing the shielding material without the use of vacuum stirrer are the most common mistakes of casting technology. Effect of which are:

- A. cast porosity.
- B. incomplete cast.
- C. little pearls on the surface of cast.
- D. dark color of cast.
- E. reverse porosity.

298. Composite does not fuse so strongly with metal coping as ceramics. Fusion of metal with composite requires special preparation of surface. Mechanical microretention includes:

- 1) retention pearls;
- 2) abrasive blasting;
- 3) electrochemical etching;
- 4) pitting corrosion;
- 5) silanization;
- 6) silicatisation;
- 7) tinning.

Correct answer is:

A. 1,2,3,4. **B.** 1,2,5,6. **C.** 3,4,5,7. **D.** 2,3,4. **E.** all of the above-mentioned.

299. In fabrication of intracoronal restorations from gold alloys, following alloys are used:

- A.** I.
- B.** II.
- C.** III.
- D.** IV.
- E.** all gold alloys.

300. Intracoronal restorations which restore central cavity, covering all occlusal surface and cusps peaks is called:

- A.** inlay.
- B.** onlay.
- C.** overlay.
- D.** partial crown.
- E.** endocrown.

301. In case of low crown, little room in occlusion and short, angled roots, in order to restore the damaged tooth tissues, you may use:

- A.** individual metal post and core and metal-porcelain crown.
- B.** ceramic onlay.
- C.** individual ceramic post and core and all-ceramic crown.
- D.** endocrown.
- E.** all of the above-mentioned.

302. Indicate true statements regarding intracoronal restorations fabricate from gold alloys:

- 1) they may be used in case of infragingival cavities;
- 2) they are used for reconstruction of lowered occlusion;
- 3) they are used both in anterior and lateral dental arch;
- 4) they may be used in patients suffering from bruxism;
- 5) they possess very good retention, close to composite restorations.

Correct answer is:

A. 1,2,4. **B.** 1,3,4. **C.** 3,4,5. **D.** 1,2. **E.** all of the above-mentioned.

303. Indicate true statements regarding individual ceramic post and cores:

- 1) indications are teeth, in case of which the planned restoration is in the form of all-porcelain and metal-porcelain crowns;
- 2) single canal and wide rooted teeth are required;
- 3) lack of visibility is the disadvantage;
- 4) cementing is low effective;
- 5) very hard to remove from the canal.

Correct answer is:

A. 1,2,4,5. **B.** 1,2,3. **C.** 3,4,5. **D.** 2,3. **E.** 2,4,5.

304. In developmental period, during tooth preparation for post and core, it should be remembered about preparing the coronal part shaped as:

- A.** cube.
- B.** rhombus.
- C.** cuboid.
- D.** cylinder.
- E.** cone.

305. Material, from which cores are made is:

- A.** gold alloys.
- B.** silver-palladium alloys.
- C.** complex materials.
- D.** ceramic materials.
- E.** all of the above-mentioned.

306. For final cementing of individual metal post and core, following cement may be used :

- 1) polycarboxylate;
- 2) zinc-phosphorous;
- 3) glass-ionomer;
- 4) hybrid glass-ionomer;
- 5) zin-oxide-eugenol;
- 6) sulfates;
- 7) self-adhesive composite;
- 8) self-etching composite;
- 9) dual composite;
- 10) light-cured composite.

Correct answer is:

A. 1,3,4,6,9. **B.** 1,2,3,6,7,8,9. **C.** 1,2,3,5,7,8,9,10.
D. 1,2,3,4,7,8,9. **E.** 2,4,5,6,7,8,10.

307. Retention of post and core **is not** dependent on:

- A.** precision of adjustment of core to the root canal.
- B.** length of the base of the core.
- C.** length of the shaft of the core.
- D.** used cement.
- E.** structure of base of the core surface.

308. Standard ceramic post and cores made of zircon oxide are characterized by:

- 1) lack of radiogram visibility;
- 2) good esthetics;
- 3) biocompatibility;
- 4) low fragility;
- 5) they require big preparation width;
- 6) lack of adhesive communication with composite cements;
- 7) difficulty in removal from the canal post cementation;
- 8) low cost.

Correct answer is:

A. 1,2,3,5,6,8. **B.** 1,2,3,4,7. **C.** 2,3,5,6,7. **D.** 3,4,5,6,7. **E.** 1,2,4,5,6,8.

309. But joint preparation:

- A.** may be used during preparation of tooth for composite onlay.
- B.** it resembles the letter U.
- C.** it is characterized with flat preparation with no margins.
- D.** answers A and C are true.
- E.** all of the above-mentioned.

310. Indicate correct order of the preparation scheme of composite core surface for cementation:

- 1) check the precision of adjustment, but not in occlusion;
- 2) silanize;
- 3) sandblasting with aluminum oxide of 50 μm under the pressure of 2-3.5 bar
- 4) rinse and dry the surface;
- 5) degrease the surface with alcohol;
- 6) dry;
- 7) apply varnish.

Correct answer is:

A. 1,2,3,5,4,7,6. **B.** 1,3,4,2,5,6,7. **C.** 2,3,4,2,5,6,7.
D. 3,4,5,2,6,7. **E.** 1,5,3,4,2,6,7.

311. In lab fabrication of individual metal post and core, working model is cast from plaster of class:

- A.** I.
- B.** II.
- C.** III.
- D.** IV.
- E.** V.

312. Vasoconstrictors based on iron compounds should not be used for retraction in case of taking the impressions with some elastomer impression materials, due to the fact of inhibiting the process of theirs curing. It concerned the following impression materials:

- A.** type A silicone .
- B.** type C silicone, polysulfide.
- C.** type A silicone, polysulfide.
- D.** type A and C silicone.
- E.** Polysulfide.

- 313.** The slightest changes in stability of impressions are observed as a result of being influenced by preparations based on water:
- A. glutaraldehyde.
 - B. active chloride.
 - C. sodium hypochlorite.
 - D. phenylo-phenol.
 - E. ethyl alcohol.
- 314.** Indicate true statements regarding acrylic materials:
- A. it is applied to the polymerization form in the rubber phase.
 - B. powder in thermosetting materials contains initiator in the amount of 5%, which is most frequently benzoyl peroxide.
 - C. addition of butadiene-styrene rubber increases the endurance of material 5-fold.
 - D. in order to obtain satisfactory mechanical properties of fast polymers, polymerization process should be carried out under the pressure of 5-6 bars and temperature of 35-40°C.
 - E. main fault of chemo-cured acrylates is reaching 10% concentration of residual monomers.
- 315.** Etching with 9.5% hydrofluoric acid does not lead to forming microretention in case of:
- A. ceramics based on aluminum oxide and zircon dioxide.
 - B. ceramics based on aluminum oxide and lithium disilicate.
 - C. feldspathic and zircon dioxide.
 - D. leucite and feldspathic.
 - E. lithium disilicate and glass.
- 316.** In bilateral subluxation of TMJ, mandible deviation:
- A. occurs towards the subluxated joint.
 - B. occurs towards the opposite side of subluxated joint.
 - C. occurs towards the healthy joint.
 - D. occurs first towards the subluxated joint followed by the opposite side.
 - E. mandible deviation does not occur.
- 317.** Audible symptoms in the form of crackling indicates:
- A. displacement of articulate discs without blockage.
 - B. irregular displacement of articular discs.
 - C. joint subluxation.
 - D. degenerative changes.
 - E. no true answer.
- 318.** In case of unilateral canine guidance, active is:
- A. only temporal muscle.
 - B. only masseter.
 - C. temporal muscle and masseter.
 - D. bilaterally temporal muscles and masseters.
 - E. only medial pterygoid muscle of the opposite side.

319. In order to assess the premature contacts, you may use:

- A. blue progressive articulation paper of 200 μm thickness.
- B. shimstock foil.
- C. blue progressive articulation paper of 100 μm thickness.
- D. silicone material for occlusal registration.
- E. red progressive articulation paper of 200 μm thickness.

320. Indicate true statements regarding the mediotrusive contacts:

- A. they occur on the working side and are localized usually in the area of molars.
- B. they occur on the balancing side and are localized usually in the area of premolars.
- C. they occur on the working side and are localized usually in the area of premolars.
- D. they occur on the balancing side and are localized usually in the area of molars.
- E. they occur on the non-working side and are localized usually in the area of premolars .

321. In established unilateral dislocation of articular disc without blockage, you observe:

- 1) the range of abduction of 30-40mm;
- 2) the range of abduction of 40-50mm;
- 3) hard abduction limitation;
- 4) return crackling;
- 5) sinuous abduction track.

Correct answer is:

- A. 1,3,4. B. 1,3,5. C. 1,4,5. D. 2,3,5. E. 2,4,5.

322. Elastic impression materials **do not** include:

- A. agar.
- B. polysulfide.
- C. vinylsiloxanoether .
- D. alginate.
- E. oxide-zinc-eugenol.

323. Which impression material is characterized by highest temperature increase during bonding:

- A. polysulfide.
- B. chemo-cured polyether.
- C. silicone A.
- D. silicone C.
- E. vinylsiloxanoether.

324. Indicate **false** statement:

- A. polyvinylsiloxane elastomers bond in the course of additive polymerization.
- B. polyvinylsiloxane elastomers bond in the course of condensing polymerization.
- C. type A silicone materials include dimethyl siloxane.
- D. type C silicone materials include dimethylsiloxane.
- E. permanent deformation in silicones type A is of around 1-3%.

325. Indicate **false** statement regarding marginal gingiva:

- A.** cords soaked with epinephrine exhibit the most beneficial clinical effect.
- B.** cords soaked with aluminum chloride or iron sulfate have better hemostatic effect than epinephrine.
- C.** aluminum chloride or iron sulfate may cause removal of smear layer.
- D.** retraction time should not exceed 5 min.
- E.** cords are introduced to the gingival sulcus starting from the proximal surface.

326. Light body of type A silicones is used:

- A.** in two-step impressions for fixed restorations as second layer.
- B.** in two-step impressions for fixed restorations as first layer.
- C.** for functional impressions.
- D.** answers B and C are true.
- E.** answers A and C are true.

327. Preparation of initial (base) impression is performed in case of:

- A.** 1-layer impression.
- B.** 2-layer impression, 1-temporary impression.
- C.** 2-layer, 2- temporary.
- D.** functional.
- E.** relining.