Nr 1. Which of the statements regarding teeth resorption caused by orthodontic treatment are false?
1) it is caused by pressure;
2) it makes the roots shorter with blunt apices;
3) the resorptive process can be reversed when the influence of causative factor stops;
4) the resorptive process can be arrested when the influence of causative factor stops;
5) etiology of the root resorption in this case is fully understood.
The correct answer is:

Nr 2. Which of the following statements regarding tooth wear are correct?
1) it is defined as the loss of hard dental tissues due to trauma and other processes;
2) it is defined as nonbacterial loss of hard dental tissues;
3) it can be a physiological process because it occurs naturally throughout life;
4) it is always a pathological process;
5) it is the result of a combination of chemical and mechanical factors.
The correct answer is:
A. 1,4. B. 2,3. C. 1,4,5. D. 1,3,5. E. 2,3,5.

Nr 3. Emergency treatment in acute purulent apical periodontitis is aimed at relieving pain. What is the optimal treatment option?
A. open the pulp chamber only leaving the tooth open to the mouth.
B. gain the drainage of pus through the root canal and then perform chemo-mechanical canal preparation, place intracanal antibacterial dressing and seal the cavity using temporary filling.
C. only prescribe an antibiotic and start treatment after several days.
D. gain the drainage of pus through the root canal and perform chemo-mechanical canal preparation, leaving the tooth open for several days.
E. open the pulp chamber, partially perform chemo-mechanical canal preparation and place antibacterial dressing into the chamber leaving the tooth open.

Nr 4. Which of the following statements regarding the development of carious process in hard dental tissues are correct?
1) the lesion on the tooth smooth surface is usually cone-shaped with the apex of the cone pointed towards the enamel-dentin junction;
2) the lesion on the tooth smooth surface is usually cone-shaped with the apex of the cone pointed towards the tooth surface;
3) the lesion spreads in dentin laterally along to the enamel-dentin junction undermining the enamel;
4) the carious lesion in dentin is cone-shaped with the apex of the cone pointed towards the pulp;
5) the occlusal carious lesion both in enamel and dentin has a conical shape with the apex of the cone pointed towards the tooth surface.
The correct answer is:
A. 1,2,4. B. 1,2,3. C. 1,3,4. D. 2,3,4. E. 2,3,5.
Nr 5. Which of the following statements regarding caries detection using bitewing radiographs is not true?

A. the appearance of carious lesion on the approximal root surface visible on radiographs can be confused with cervical radiolucency.
B. a carious lesion on the approximal crown surface looks like a dark triangular area in the enamel on bitewing radiographs.
C. bitewing radiographs can help diagnose approximal caries both in enamel and dentin.
D. bitewing radiographs can help diagnose approximal caries only in dentin.
E. the carious lesion in enamel on occlusal surface is not visible on bitewing radiographs.

Nr 6. The term “hidden caries” means the carious lesion:

A. located on approximal surface and which is not detected on visual examination but found on radiographs.
B. located on the occlusal surface of posterior teeth and which is not detected on visual examination but found on radiographs.
C. located in the area which is difficult for visual examination (e.g. on the distal surface of the last molar in the dental arch).
D. with atypical course.
E. occurring only in the patients living in areas with fluoridated water.

Nr 7. Which of the following properties of resin-modified glass ionomer cements are true?

1) their setting is light-initiated;
2) they are hydrophobic;
3) they release and uptake fluoride ions at the same level as self-curing conventional glass ionomer cements;
4) they can release only small amounts of fluoride ions in comparison with conventional glass ionomer cements;
5) they are only used as a liner/base in the layered glass ionomer/composite restoration.

The correct answer is:

Nr 8. Which of the following statements regarding secondary (recurrent) caries is not true?

A. it is new decay at the margin of a restoration.
B. it occurs in the area of dental plaque retention.
C. stain around a restoration is not synonymous with secondary caries provided the margin of the filling is intact.
D. groove around amalgam filling is indicative of secondary caries.
E. as with primary caries, secondary caries may be active or arrested.

Nr 9. Which of the following statements regarding preventive resin restoration (PRR) is false?

A. this method restores small carious cavities and seals neighboring occlusal fissures.
B. it is indicated where a cavity is only present in enamel.
C. it is indicated where dentin makes the bottom of the cavity.
D. it is indicated for a lesion visible on bitewing radiographs.
E. it is recommended for small cavities.
Nr 10. The principles of root canal preparation include:
   1) maintenance of the original shape;
   2) obtaining of smooth walls;
   3) significant widening of the root canal;
   4) correction of the unfavorable shape of the root canal;
   5) maintenance of the original position of the apical foramen.

The correct answer is:
A. 1,2,3.  B. 3,4,5.  C. 2,3,5.  D. 1,2,5.  E. 1,4,5.

Nr 11. Which of the following statements regarding calcifications within the pulp are correct?
   1) usually they do not block completely the orifices;
   2) they may reach significant sizes;
   3) they are found only within pulp chambers;
   4) calcifications may have two different forms;
   5) they exclude the tooth from endodontic treatment.

The correct answer is:
A. 1,2,4.  B. 1,2,3.  C. 2,3,5.  D. 3,4,5.  E. 1,4,5.

Nr 12. Which of the following statements concerning hyperplastic pulpitis are correct?
   1) hyperplastic pulpitis is a form of chronically inflamed pulp overgrowth;
   2) it occurs especially in young patients;
   3) it is the cause of throbbing, sharp, constant pain;
   4) it is an indication for removal of the tooth;
   5) the outgrowth consist of inflamed connective tissue covered by implanted cells of the oral epithelium.

The correct answer is:
A. 1,2,4.  B. 2,3,4.  C. 1,2,5.  D. 2,3,5.  E. 1,3,5.

Nr 13. A 45-year-old woman complains of some pain in the region of lower left second premolar and swelling of the adjacent gingival. The tooth has never be treated before and appears sound but presents slight mobility. Pulp sensitivity test is positive. These signs and symptoms may suggest:
A. acute pulpitis.  D. chronic apical periodontitis.
B. periodontal abscess.  E. periapical abscess.
C. acute apical periodontitis.

Nr 14. The most reliable test in assessing the status of the pulp is:
A. cold test.  D. blood flow determination by Laser Doppler flowmetry.
B. test of cutting the dentine.  E. heat test.
C. electrical test.
Nr 15. The most common results of the replantation of the teeth whose root development was completed are:

1) internal resorption; 2) surface resorption; 3) ankylosis; 4) osteitis.

The correct answer is:

Nr 16. The symptoms of subluxation do not include:
A. hemorrhage and edema within the periodontal ligament.  D. gingival bleeding.
B. increased mobility.  E. tenderness on percussion.
C. displacement.

Nr 17. Which of the following sentences concerning fluorosis is not true?
A. fluorosis is a qualitative defect of enamel.
B. defects of the enamel in severe forms of fluorosis may also be quantitative (hypoplasia).
C. excessive fluoride intake, especially during formation and maturation of enamel, is crucial in the creation of fluorosis.
D. the excess of fluoride inhibits withdrawal of enamelin and amelogenins during enamel mineralization.
E. fluorosed teeth can not be treated with acid etching procedures.

Nr 18. Caries risk assessment includes the following except for:
A. diet, oral hygiene, personal and familial caries history.
B. psychological profile.
C. medical history, salivary flow rate and the quality of saliva.
D. socioeconomic status, ethnicity.
E. access to tap water, exposure to fluoride.

Nr 19. The first-choice antibiotic used to treat odontogenic infection is:

Nr 20. The working length of the canal is the distance between:
A. reference point and the apical constriction.
B. reference point and the true apex.
C. canal orifice and the apical constriction.
D. canal orifice and the anatomic root apex.
E. canal orifice and the radiographic apex.

Nr 21. Endodontic files and reamers are available in lengths (without the handle):
A. 16,20,30 mm.  B. 16,25,29 mm.  C. 16,21,31 mm.  D. 21,25,31 mm.  E. 21,28,30 mm.

Nr 22. Calcium hydroxide as an intracanal medicament:
A. inactivates alkaline phosphatase.  D. decreases pH in periapical tissues.
B. releases Ca\(^{2+}\) and OH\(^{-}\) ions.  E. used as a single active agent is effective against \textit{E. faecalis}.
C. increases pO\(_2\) in periapical tissues.
Nr 23. Which sentence concerning intrapulpal anesthesia is false?
A. it is an injection of local anesthetic given directly into the pulp.
B. injection is painful.
C. short time of anesthesia is its characteristic feature.
D. elimination of the pain is not the result of pharmacological activity of the medicament.
E. elimination of the pain is also the result of the pressure created during the deposition of anesthetic solution.

Nr 24. A 35-year-old patient presents with malaise, fever and very strong, pulsating pain without remissiones and intermissiones in the region of the tooth 34. An extra- and intraoral examinations reveal small painful eminence in the root apex projection and developing swelling. There is no evidence of sinus tract. The tooth is painful on percussion and palpation, it has the 2nd degree of mobility. X-ray examination shows the PDL space widening. The above is the description of:
A. periapical abscess;
B. subperiosteal abscess.
C. submucosal abscess.
D. recurrent abscess.
E. phoenix abscess.

Nr 25. Why xylitol, which is the sugar substitute used in foodstuffs, delays the growth of the microorganisms that form dental plaque?
A. cariogenic bacteria do not have possibilities of fermenting xylitol and cannot use it as a substrate.
B. xylitol inhibits enzymes which play an important role in bacterial metabolism of carbohydrates.
C. xylitol makes glucose transport through the cell membrane of cariogenic bacteria difficult.
D. xylitol promotes calcium fluoride formation on the tooth surface.
E. all the answers are correct.

Nr 26. Which method of caries treatment is presented in the picture below, assuming that the dotted line indicates the area sealed around central pit tooth preparation on the occlusal surface?
A. PRR.
B. ART.
C. typical RMGI restoration.
D. typical composite restoration.
E. typical sandwich restoration.

Nr 27. Which of the following statements concerning matching the colour of restoration is false:
A. restoration colour is matched on the basis of the material shade guide.
B. colour should be matched before rubber dam placement.
C. the best way of matching the colour is doing it in artificial light.
D. in choosing the material colour it is necessary to take into account also its transparency.
E. restoring the incisal edge the transparent shade should be chosen.
**Nr 28.** Which of the following constitutes the proper reaction of the pulp to thermal stimuli:

A. brief, sharp pain when a stimulus is applied subsiding after stopping its application.
B. intense pain when a stimulus is applied lasting up to 2 minutes after stopping its application.
C. brief, sharp pain triggered by a cold stimulus and no response to a hot stimulus.
D. brief, sharp pain triggered by a hot stimulus and no response to a cold stimulus.
E. no pain reaction in response to cold and hot stimuli.

**Nr 29.** Which of the following adhesive systems include the total-etch technique?

A. fourth- and fifth-generation adhesives.  
D. fifth- and seventh-generation adhesives.
B. fourth- and sixth-generation adhesives.  
E. sixth- and seventh-generation adhesives.
C. fifth- and sixth-generation adhesives.

**Nr 30.** Which of the following materials has the highest fluoride release?

A. composite.  
B. conventional GIC.  
C. amalgam.  
D. compomer.  
E. all the above materials may release fluoride ions to a similar extent.

**Nr 31.** The dental history of a 44-year-old patient reveals regular chewing on a pen or pencil and brushing the teeth by the horizontal scrubbing method. Which clinical picture will be characteristic of this patient?

A. extensive erosive cavities.  
B. attrition on the incisal edges of the anterior teeth.  
C. abrasion with gingival recession.  
D. abfraction in the cervical region.  
E. demastication.

**Nr 32.** A 55-year-old female patient presents to the dentist with a recurring pain in the region of the posterior upper teeth on the right side. She says that on touching her right cheek a very intense, shooting pain appears and subsides within a few minutes. Intraoral examination reveals restorations class I according to Black in the teeth 15 and 17 and class II MO in the tooth 16. The above-mentioned teeth reaction to stimuli is within normal limits. The patient has not experienced any trauma recently and has not been treated by another dentist. What initial diagnosis can be given?

A. reversible pulpitis.  
B. irreversible pulpitis.  
C. acute periapical periodontitis.  
D. maxillary sinusitis.  
E. trigeminal neuralgia.
Nr 33. Indicate the true statements concerning the methods of removing gutta-percha from root canals in the case of retreatment:

1) single cone may be removed with Hödstrem file, which after being inserted between the cone and canal wall is pulled toward the tooth crown;
2) the best method to remove well condensed gutta-percha is to use rotary nickel-titanium files;
3) gutta-percha may be removed with a heated hand file or a plugger;
4) solvents, such as chloroform or methylchloroform, should not be used during gutta-percha removal.

The correct answer is:
A. 1,2,4.  B. 1,3,4.  C. 1,2,3.  D. 2,3,4.  E. all the answers are true.

Nr 34. What is recapitulation performed for?
A. diagnostic purposes.
B. thorough cleaning of the root canal by the multiple use of irrigant.
C. obtaining precise measurement of the working length.
D. maintaining the root canal patency to the narrowing point near the apex.
E. measurement of the root canal working length.

Nr 35. On the X-ray of a 52-year-old female patient, taken because of periodontal pocket between the teeth 34 and 35, the presence of radiolucency at the apex of the tooth 35 is stated with intact lamina dura around the root apex. In clinical examination the pulp response to stimuli is within normal limits, the patient has not experienced any trauma in this region and has not complained about any pain connected with the tooth 35. What may be the cause of the observed radiolucency?
A. pulp necrosis.
B. chronic periapical inflammation.
C. periapical abscess.
D. mental foramen.
E. apical delta.

Nr 36. Choose the true statement describing limits concerning endodontic treatment:
A. some diseases such as gastric ulcer, renal diseases, hyperthyroidism are contraindications to endodontic treatment.
B. in patients with circulatory system diseases complications may occur after endodontic treatment.
C. diseases compromising the immune system, e.g. viral hepatitis, HIV infection, diabetes, health status after organ transplantation with the necessity of taking drugs preventing the rejection of transplants may affect the course of endodontic treatment and its outcomes.
D. endodontic treatment is contraindicated in pregnant women.
E. endodontic treatment may be performed without any limits and concerns in each patient regardless of systemic diseases.
Nr 37. Indicate the true statements concerning EDTA:
1) it is a chelating agent;
2) it resolves organic and inorganic components in the root canal;
3) it removes efficiently smear layer when used as a single agent;
4) its efficiency in removing the smear layer is similar to citric acid;
5) after EDTA application it is recommended to rinse the canal with copious amount of sodium hypochlorite.

The correct answer is:
A. 1,3,4.  B. 1,4,5.  C. 1,2,3.  D. 1,3,5.  E. all answers are correct.

Nr 38. What does the following X-ray show?

A. via falsa in the course of endodontic treatment.
B. gutta-percha cone left in the bone after incorrectly obturated root canal.
C. presence of a sinus tract opening on the oral mucosa – an X-ray with gutta-perrcha cone placed in the sinus tract was taken.
D. endodontic instrument displaced while taking an X-ray.
E. the X-ray was taken in the course of endodontic treatment of the tooth 15 – the projection of a metal element of jewellery on the structure of the alveolar ridge is visible.

Nr 39. What should the minimum size of the endodontic instrument be if it is placed in the canal and we want it to be clearly visible on the radiograph?

Nr 40. Which disorders may produce toothache-like symptoms (referred pain)?
1) temporomandibular joint disorders;
2) myocardial ischemia;
3) liver diseases;
4) neuralgia;
5) duodenal ulcer;
6) maxillary sinus infection.

The correct answer is:
A. 1,2,3,5.  B. 1,2,4,6.  C. 1,4,5,6.  D. 2,3,4,5.  E. 2,3,4,6.
Nr 41. A 35-year-old patient presents with a pain of the tooth 14 on mastication. The patient reports that the tooth was endodontically treated some years ago. Clinical examination demonstrated restoration class II MO according to Black and increased reaction to vertical percussion. The patient was sent for taking an X-ray and the radiogram shows only one canal. Was the X-ray taken correctly?

A. yes, maxillary first premolars usually have 1 root canal.
B. yes, maxillary first premolars always have 2 canals but it is impossible to make them both visible on the X-ray.
C. no, maxillary first premolars usually have 2 canals but the patient moved during exposition and the second canal is not visible – it is necessary to re-take an X-ray in orthoradial projection.
D. probably not, because maxillary first premolars usually have 2 canals and in order to make them visible it is necessary to take an X-ray with excentric projection instead of orthoradial projection.
E. no, maxillary first premolars usually have 2 canals and in order to make them visible it is necessary to take a bite-wing X-ray.

Nr 42. Which of the following are the most common oral malignancies associated with HIV infection:

1) malignant melanoma; 4) adenocarcinoma;
2) squamous cell carcinoma; 5) non-Hodgkin lymphoma.
3) Kaposi sarcoma;

The correct answer is:


Nr 43. The differential diagnosis of malignant melanoma should include the following pigmented lesions:

A. oral melanotic macule. D. naevus.
B. heavy metal pigmentation. E. all the above.
C. amalgam tattoo.

Nr 44. Endomethasone N is a:

A. synthetic resin-based endodontic sealer containing polyketone.
B. dual-cure hydrophilic resin endodontic sealer containing paraformaldehyde.
C. zinc oxide eugenol-based endodontic sealer containing dexamethasone.
D. zinc oxide eugenol-based endodontic sealer containing hydrocortisone acetate.
E. radiopaque material for the root perforation repair.

Nr 45. Pulp inflammation can be a side effect of the preparation of the lesion localized in enamel and dentin. Indicate which of the following contains iatrogenic factor and true explanation of the mechanism resulting in pulp inflammation:

A. cooling with air alone, because it desiccates dentin.
B. use of dull and plugged with debris burs, because they push smear layer into the dentinal tubules.
C. use of steel burs, because they produce more vibrations in comparison with carbide ones.
D. use of too big a size of the bur, which results in a transection of odontoblastic processes.
E. use of air-water spray when working in dentin, because it results in loss of dentinal tubule fluid.
Nr 46. A useful diagnostic tool for tooth crack evaluation is:
A. percussion test.   D. A and B are correct.
B. dyes.              E. B and C are correct.
C. transillumination.

Nr 47. Which of the following oral cavity pathologies are induced by supernumerary teeth:
A. odontogenic cysts.  D. root resorption of adjacent teeth.
B. permanent teeth displacement.  E. all the above.
C. diastema formation and tooth rotation.

Nr 48. The neonatal teeth are the teeth that erupt during the first:
A. twenty-four hours after birth.  D. 60 days after birth.
B. 30 days after birth.            E. 90 days after birth.
C. 50 days after birth.

Nr 49. When should dental treatment be finished to enable proper soft tissue healing before chemotherapy or total body irradiation?
A. 3 days at the latest.       D. 30 days at the latest.
B. 6 days at the latest.       E. 90 days at the latest.
C. 14 days at the latest.

Nr 50. Indicate the true statements regarding bacterial bone inflammation:
1) most often occurs in mandible;
2) most often occurs in maxilla;
3) on radiograph the bone looks like “moth-eaten”;
4) treatment includes bone sequestrum removal along with antibiotic therapy for 4 weeks;
5) treatment encloses bone sequestrum removal with curettage along with antibiotic therapy for at least 6 weeks.
The correct answer is:
A. 1,2,3.   B. 2,4,5.   C. 1,3,4.   D. 2,3,5.   E. 1,3,5.

Nr 51. Which of the following symptoms does not occur in cleidocranial dysplasia?
A. short stature.
B. aplasia or hypoplasia of one or both clavicles, maxillary hypoplasia.
C. numerous supernumerary teeth, delayed tooth eruption.
D. closely seated eyeballs and mandibular hypoplasia.
E. retarded ossification of fontanelles and sutures, bossing of the forehead.

Nr 52. The formation of geminate, double or fused teeth is a result of developmental disorders during:
B. histological differentiation.  E. tooth eruption and root development.
C. morphological differentiation.
Nr 53. Angle’s classification defines:
A. mutual position of the mandible and maxilla in relation to the skull base.
B. mutual mesiodistal position of the upper and lower molars.
C. mutual position of the upper and lower incisors.
D. tooth eruption sequence disorder.
E. none of the above.

Nr 54. Small and reversible pulpitis, a caries-damaged marginal ridge in the proximal area of the deciduous first molars and radiologically confirmed caries reaching up to 2/3 of the dentin depth with probability of mechanical or carious pulp denudation. The above mentioned signs are the indication for:
A. direct pulp capping.
B. partial pulp amputation.
C. complete crown pulp amputation.
D. pulp extirpation.
E. tooth extraction.

Nr 55. It is recommended that parents should clean their children’s deciduous teeth starting from the moment when:
A. the first tooth erupts.
B. upper front teeth erupt.
C. lower front teeth erupt.
D. incisors and canines erupt.
E. all deciduous teeth erupt.

Nr 56. Which developmental disorder is induced by neural crest cell migration (ectomesenchyme) to the brachial arches?
A. odontogenic keratocysts.
B. conical primary teeth.
C. missing primary teeth.
D. double alveolar arches.
E. retarded tooth eruption.

Nr 57. Which factor should not be considered before the implementation of fluoride prophylaxis?
A. cariogenic diet, a caries risk (high, medium, low).
B. patient’s age and susceptibility, health condition.
C. child gender.
D. fluoride concentration in tap water.
E. recent fluoride local and systemic application.

Nr 58. The symptoms of acute fluoride intoxication include:
A. nausea and stomach-ache often accompanied by vomiting.
B. hypersalivation, mucus secretion from the nose and oral cavity, lacrimation and hyperhidrosis.
C. headache.
D. general weakness, diarrhea.
E. all the answers are correct.

Nr 59. Iron sulphate has been recently used as medicament in dental treatment for:
A. indirect pulp capping.
B. direct pulp capping.
C. deciduous teeth pulpotomy.
D. immature permanent teeth pulpotomy.
E. intervisit medication after vital extirpation.
Nr 60. Which of the following does not induce gingival hyperplasia when used in systemic therapy:

Nr 61. If there is no additional injury deteriorating prognosis, such as bone crest or root fracture, the avulsed tooth after replantation should be splinted for:
A. 7-10 days.  B. 10-14 days.  C. 21 days.  D. 3-4 weeks.  E. 2-3 months.

Nr 62. During the extraoral examination of a child the dentist should assess:
A. skin colour and its appearance.  B. facial symmetry, facial measurement and the basic orthodontic facial type.  C. health condition, height and weight.  D. temporomandibular joints; neck, submandibular and nuchal lymphatic nodes.  E. all the answers are correct.

Nr 63. Which permanent tooth buds and in which child developmental phase first undergo mineralization process?

Nr 64. Delayed deciduous and permanent tooth eruption can occur in:
1) hypopituitarism;  4) Down syndrome;
2) hypothyroidism;  5) cleidocranial dysplasia;
3) A and D vitamin deficiency;  6) glycogenosis.
The correct answer is:
A. 1,3,5.  B. 2,4,5.  C. 1,2,6.  D. 1,2,3,4.  E. all the above.

Nr 65. Primary tooth roots undergo physiologic resorption in:
A. sinus form.  D. inflammatory form.
B. linear form.  E. A and B are correct.
C. replaceable form.

Nr 66. The method that is not applied in primary tooth caries treatment is:
A. remineralisation.  D. steel crowns.
B. impregnation.  E. caries lesion filling.
C. termoabrasion.

Nr 67. Which of the following stereotypic movement disorder, which is habitual, is not a parafunction?
A. sucking a pacifier.  D. sucking finger(s).
B. biting nails.  E. bruxism.
C. faulty mouth breathing.
Nr 68. Which of the following examinations performed in patients at developmental age is thought to be the most competent to evaluate pulp condition?
A. diaphanoscopy.  
B. hot test.  
C. cold test.  
D. faradic current.  
E. laser fluorescence.

Nr 69. Generalized enamel hypoplasia cannot be induced by:
A. rubella.  
B. defective calcium and phosphates absorption.  
C. varicella.  
D. thyroid gland diseases.  
E. submucosal abscess, as complication of pulpitis.

Nr 70. Hyperdontia is a consequence of:
A. lack of space in dental arch.  
B. deficiency rickets.  
C. hyperfunction of dental lamina.  
D. premature deciduous tooth loss.  
E. maxilla and mandible bone inflammation.

Nr 71. The caries lesion treatment of the four-year-old child with no symptoms should commence with:
A. central incisors.  
B. lateral incisors.  
C. upper canines.  
D. first premolars.  
E. second premolars.

Nr 72. The contraindication to relative analgesia with dinitrogen monoxide are:
1) upper respiratory tract obstruction;  
2) numerous caries lesions;  
3) children with psychosis;  
4) gingivitis;  
5) malocclusion.

The correct answer is:
A. 1,2.  
B. 1,3.  
C. 2,3.  
D. 1,4.  
E. 4,5.

Nr 73. In the cases of dental and bone crest trauma it is recommended to use radiographic visualisation such as:
1) axial bitewing radiographs of mandible and maxilla;  
2) panoramic radiographs;  
3) lateral radiographs of maxilla in case of primary front tooth intrusion;  
4) computer tomography;  
5) semiaxial radiograph 30° angle (OM30 or Waters projection).

The correct answer is:
A. 1,2,3.  
B. 2,4,5.  
C. 1,4,5.  
D. 2,3,5.  
E. 1,3,4.

Nr 74. In the case of permanent tooth luxation the clinical observation including the examination of pulp condition, tooth colour and mobility and radiographs concerning pulp chamber size and root development should be carried on for at least:
A. 1 year.  
B. 2 years.  
C. 3 years.  
D. 4 years.  
E. 6 years.

Nr 75. Child developmental age assessment is based on:
A. morphological age.  
B. bone age.  
C. dental age.  
D. secondary sexual characteristic.  
E. all the above.
Nr 76. Delayed tooth eruption in child can be diagnosed when:
A. primary teeth erupt after 8 months of age.
B. primary teeth start to erupt after 7 months of age and the permanent teeth after 7 year of age.
C. primary teeth start to erupt after 12 months of age and the permanent teeth after 8 year of age.
D. permanent teeth erupt after 8 year of age.
E. A and D are correct.

Nr 77. An 11-year-old child reports pain of the primary lower second molar, which suggests irreversible pulpitis. What kind of treatment should be implemented?
A. direct pulp capping.
B. pulp amputation with biological method.
C. mortal pulp treatment.
D. leaving the tooth open.
E. tooth extraction.

Nr 78. The signs of scarlet fever in oral cavity do not include:
A. strawberry tongue.
B. red and bumpy tongue.
C. white coating pilling off from the tongue.
D. Koplik’s spots.
E. burning throat.

Nr 79. It is not a premature primary tooth loss if primary tooth is extracted when:
A. roots have not been resorbed yet.
B. roots have been slightly resorbed.
C. the corresponding permanent tooth bud is not in the eruptive phase.
D. the corresponding permanent tooth bud is located deeply in the alveolar bone.
E. the corresponding permanent tooth bud is in the prefunctional eruptive phase.

Nr 80. In children with primary dentition the most frequent causes of perimandibular and submandibular abscesses are inflammatory processes in the area of:
A. lower central incisors.
B. lower lateral incisors.
C. lower canines.
D. lower first molars.
E. lower second molars.

Nr 81. The signs of this disease process begin very early in the primary dentition shortly after tooth eruption, first on the vestibular surfaces of the maxillary incisors in the cervical areas and on the occlusal surfaces of the molars, spreading rapidly despite treatment. To which caries the above-mentioned description applies:
A. superficial.
B. circular.
C. moderate.
D. incipient.
E. early childhood.

Nr 82. Anesthetic applied extraorally into the infraorbital foramen causes anesthesia of the following areas apart from:
A. ipsilateral upper lip.
B. skin of the cheek.
C. side of the nose.
D. anterior wall of the maxillary sinus.
E. all upper incisors.
Nr 83. How long after the first symptoms of acute osteitis do the radiological signs occur?
A. after 48 hours from acute clinical onset.    D. after 3 weeks.
B. within the first week.                      E. after 1 month.
C. after 10-14 days.

Nr 84. A characteristic feature of Gorlin-Golz syndrome is/are:
A. numbness of the lower lip.
B. dense and sparse areas seen on X-ray examination.
C. basalioma (basal cell carcinoma) sites.
D. pain on palpation of the apex of the root area.
E. none of the above.

Nr 85. Empyema is defined as:
A. collection of pus located below periosteum.
B. collection of pus under the mucous membrane.
C. collection of pus located subcutaneously.
D. collection of pus in a naturally existing anatomical cavity, without possibility of evacuation.
E. limited area of osteolysis in the proximity of a tooth apex.

Nr 86. Purulent alveolitis is one of complications of tooth extraction. Which of the following correctly describes this complication?
A. it is caused by viral infection of the thrombus.
B. it is local osteitis.
C. it does not need treatment.
D. treatment consists in applying a dressing once.
E. treatment consists in tight suturing of the alveolus.

Nr 87. The most common tumor of the parapharyngeal space is:
A. pleomorphic adenoma.    D. neurilemmoma.
B. adenocarcinoma.        E. ganglioneuroma.
C. lymphoma.

Nr 88. The maxillary sinus ostium is located in:
A. superior meatus.    D. between the inferior and middle meatus.
B. between the superior and middle meatus.  E. inferior meatus.
C. middle meatus.

Nr 89. It is rarely necessary to remove primary teeth before substantial root resorption has occurred. However, when the removal is required, it should be done with a great deal of care because:
A. usually poor cooperation of small children.
B. applying great forces can cause a jaw fracture.
C. the roots of those teeth are very long, delicate and hook-shaped.
D. using great forces can expand the socket.
E. it is usually hard to inspect and debride surgical field after the extraction.
Nr 90. Once extraction has been completed, the initial maneuver to control postoperative bleeding is the placement of a small gauze directly on the empty socket. The patient should be instructed to bite firmly on this gauze for:
A. 10 minutes.  B. 15 minutes.  C. 20 minutes.  D. 30 minutes.  E. 1 hour.

Nr 91. Which of the following types of ameloblastoma shows the highest aggressiveness:
A. solid/multicystic.  B. desmoplastic.  C. unicystic.  D. all the types show similar aggressiveness.  E. A & C are correct.

Nr 92. Primary Sjögren’s syndrome is characterized by:
A. xerostomia, connective tissue disorder.  B. keratoconjunctivitis sicca, connective tissue disorder.  C. xerostomia, rheumatoid arthritis.  D. xerostomia, keratoconjunctivitis sicca, connective tissue disorder.  E. xerostomia, keratoconjunctivitis sicca.

Nr 93. The Le Fort II fracture separates:
A. maxilla from the zygomatic bone.  B. upper midface bones including both nasal bones, and partially the ethmoid bone, the maxilla and the zygomatic bones.  C. upper midface bones from the orbital and zygomatic structures.  D. nasomaxillary segment from zygomatic and upper lateral midface.  E. maxilla and the zygomatic bones from the cranial base.

Nr 94. The bacteria that cause perimaxillary infections consist of many species. The most common causative organisms are:

Nr 95. Choose the correct indications for periapical surgery:
1) root fracture at the apical third region with the pulp necrosis;
2) unidentified cause of the root canal treatment failure;
3) deciduous teeth;
4) periapical lesions that do not resolve in root canal treatment;
5) instruments left in the root canal during endodontic treatment.
The correct answer is:
A. 1,2,3,5.  B. 1,4,5.  C. 1,3,5.  D. 2,4,5.  E. 2,3,4,5.

Nr 96. Which of the five stages of anaphylactic reactions can cause an acute, life-threatening condition?
A. only stage 0.  D. stage III.
B. only stage I.  E. stage III and IV.
C. stage I and II.
Nr 97. Choose the true statements considering actinomycosis:
1) actinomycosis is a primarily chronic disease caused by anaerobic bacteria;
2) actinomycosis causes significant pain and its clinical symptoms bear resemblance to neoplastic tumors;
3) actinomycosis of the bone affects mostly mandible, especially its angle;
4) pathogenic organisms causing actinomycosis are resistant to temperature change. Therefore, microbiological specimens don’t need to be sent for testing immediately after sampling;
5) penicillin is the drug of choice in the treatment of actinomycosis; the treatment can take up to a few weeks.
The correct answer is:
A. 1,2,4.  B. 1,4,5.  C. 2,3,5.  D. 3,4,5.  E. 1,3,4.

Nr 98. Choose the true statements regarding the infratemporal space abscess:
1) the anterior border of the infratemporal fossa is the maxillary tuberosity;
2) infections of this space never spread from the buccal space;
3) precautionary biopsy should precede incision and opening of the space;
4) in some cases intraoral examination can reveal swelling and fluctuance in the vicinity of the upper molars;
5) the incision for drainage of the infratemporal space abscess is performed only extraorally.
The correct answer is:
A. 1,3,4.  B. 1,2,4.  C. 2,3,5.  D. 2,4,5.  E. 1,4,5.

Nr 99. Choose the true statements:
1) the keratocyst is usually a unilocular or less often bilocular cyst;
2) one of the distinguishing features of the keratocyst is keratosis of the internal layer of the cyst membrane;
3) the keratocyst should be differentiated from the follicular cyst and ameloblastoma;
4) the radicular cyst is the most common one among inflammatory cysts;
5) the least common cyst is a follicular cyst associated with a completely formed tooth.
The correct answer is:
A. all the above.  B. 3,4,5.  C. 1,3,4.  D. 2,4,5.  E. 1,2,4.

Nr 100. The most common causes of convulsions during a dental visit are:
1) epilepsy;  4) brain tumors;
2) hypoglycemia;  5) water-electrolyte imbalance.
3) local anesthetics overdose;
Sort the causes from the most common to the least common:
A. 1,2,3,4,5.  B. 2,3,1,5,4.  C. 3,5,1,2,4.  D. 3,4,5,1,2.  E. 4,2,1,3,5.

Now, take the other answer ticket in order to mark the answers to questions 101 - 200.
Nr 101. Choose the true statements regarding the traumatic bone cyst:
1) it has no connective tissue membrane;
2) in the area where a haematoma and blood clot were formed the cancellous bone is destroyed and the trabeculae are liquified;
3) other name for the traumatic bone cyst is the aneurysmal bone cyst;
4) epidermoid cyst, keratocyst and aneurysmal bone cyst all arise from single cells of the epidermis or dermis germ layer during the formation and closure of body cavities;
5) some authors identify the aneurysmal bone cysts with cell cysts and claim that those are cysts which accompany repair processes or neoplastic tumor formation in the bone.

The correct answer is:
A. 1,5. B. 2,3. C. 4,5. D. 1,2. E. 2,5.

Nr 102. The advantage of right-angle technique in dental radiology is:

Nr 103. Non-odontogenic cysts include:
1) nasopalatine cyst; 4) gingival cyst;
2) traumatic bone cyst; 5) primordial cyst.
3) follicular cyst;

The correct answer is:
A. 1,2,4. B. 3,4,5. C. 1,2. D. 1,4,5. E. 2,3,4.

Nr 104. Choose the true statements regarding osteomyelitis:
1) chronic osteomyelitis is always a consequence of acute osteomyelitis;
2) symptoms of chronic osteomyelitis include intraoral and extraoral fistulae arising from abscesses during the acute phase;
3) severe periosteal reaction is specific to chronic osteomyelitis;
4) one of the basic diagnostic tests is bone scintigraphy;
5) owing to wide availability of antibiotics the Obwegeser’s decortication procedure is not used anymore.

The correct answer is:
A. 1,2,3. B. 2,4,5. C. 2,3,4. D. 1,3,4. E. 2,3,5.

Nr 105. Which of the following statements concerning facial nerve paralysis are true?
1) infranuclear lesions cause one-sided paralysis of the muscles of facial expression;
2) supranuclear lesions cause paralysis of the muscles of the lower half of the face on the affected side only;
3) prognosis of facial nerve paralysis caused by viral infection is rather good;
4) the necessity of protecting the cornea from drying and ulcerations is an indication for partial suturing of the eyelids;
5) in some patients with permanent facial nerve paralysis muscle neurotization is performed.

The correct answer is:
A. 1,3,4,5. B. 2,3. C. 1,5. D. 2,4. E. 1,2.
Nr 106. Episodes of pain radiating towards the ear or neck and additional symptoms from the autonomic nervous system, such as bradycardia, can be manifestation of:

1) Hunt syndrome; 4) carotid artery syndrome;
2) Costen syndrome; 5) Sluder syndrome.
3) glossopharyngeal neuralgia;

The correct answer is:
- A. only 3.
- B. 1,3,4.
- C. 1,3,5.
- D. 2,4,5.
- E. 2,3,5.

Nr 107. The rupturing of the blister leads directly to the creation of:

- A. ulceration.
- B. fissure.
- C. squama.
- D. crust.
- E. scar.

Nr 108. Aciclovir is used in the treatment of:

- A. zoster.
- B. leukoplakia.
- C. lichen planus.
- D. cheilitis.
- E. recurrent aphthous stomatitis.

Nr 109. Indicate the true statements regarding leukoplakia:

1) it is the disease with a high risk of malignant transformation;
2) it is the reaction of epithelium to the irritating factor;
3) the primary lesion of leukoplakia is the plaque;
4) conservative treatment includes vitamin A dosing.

The correct answer is:
- A. 1,2,3.
- B. 1,2,4.
- C. 1,3,4.
- D. 2,3,4.
- E. all the above.

Nr 110. Hunter’s glossitis is the symptom of:

- A. candidiasis.
- B. B\textsubscript{12} or folic acid deficiency.
- C. foot-and-mouth disease.
- D. oral lichen planus.
- E. dermatitis herpetiformis.

Nr 111. Wickham striae are present in:

- A. cheilitis.
- B. leukoplakia.
- C. zoster.
- D. lichen planus.
- E. candidiasis.

Nr 112. Which of the following bacteria belong to red bacterial complex:

1) \textit{Fusobacterium nucleatum};
2) \textit{Tannerella forsythia};
3) \textit{Treponema denticola};
4) \textit{Campylobacter rectus};
5) \textit{Porphyromonas gingivalis}.

The correct answer is:
- A. 1,2,5.
- B. 2,3,4.
- C. 1,3,5.
- D. 2,3,5.
- E. 2,4,5.

Nr 113. Primary features of the aggressive periodontitis \textbf{do not} include:

- A. domination of \textit{Aggregatibacter actinomycetemcomitans}.
- B. rapid loss of periodontal tissues.
- C. lack of coexisting general disease.
- D. family history of the disease.
- E. inflammation disproportionate to the amount of dental deposits.
Nr 114. An acute periodontal state is:
A. inflammation in the course of acute lymphoma.  D. diabetic gingivitis.
B. acute necrotizing ulcerative periodontitis.  E. all the above.
C. generalized aggressive periodontitis.

Nr 115. Regenerative materials used in periodontal surgery include the following materials:

Nr 116. Which of the following statements concerning non-surgical periodontal therapy is true?
A. it is necessary to remove all root cementum because it is fully impregnated with bacterial lipopolysaccharide.
B. circular vibration of piezoelectric scalers with carbon tips tent to be most effective in removing subgingival debris in the area of the front teeth.
C. the most effective way of removing debris in the subgingival area is to set the tip of the mechanic scaler at 90 degrees to the surface of the tooth.
D. contraindication to non-surgical periodontal therapy is the value of API index ranging from 15% to 25%.
E. reduction of the pockets’ depth is bigger and probing attachment gain better if the initial probing depth (PD) > 7 mm when set beside PD 4-6 mm.

Nr 117. Which of the following agents is used in periodontal therapy in order to control chemical supragingival plaque and to inactivate subgingival biofilm?
A. doxycycline.  D. chlorhexidine.
B. metronidazole.  E. stannous fluoride and amine fluoride.
C. triclosan with co-polymer.

Nr 118. Which of the following sentences concerning periodontal abscess is false?
A. it is always an indication to systemic antibiotics.
B. it is always a proof of periodontitis.
C. vital pulp response of the tooth is very important in differentiating the periodontal from periapical abscess.
D. the tooth is sensitive to percussion.
E. alveolar bone resorption occurs around the tooth with the abscess.

Nr 119. The most appropriate number of Gracey curette for simultaneous subgingival scaling and root planing around teeth 33 and 34 is:

Nr 120. Retinoids are applied in the treatment of:
A. recurrent aphtae.  D. candidiasis.
B. pemphigus.  E. erythema multiforme.
C. lichen planus.
Nr 121. Occlusal plane:
A. is one of the frontal planes.
B. is the horizontal plane tangent to the tops of the buccal cusps of the premolars.
C. defines the dental arch symmetry.
D. is perpendicular to the palatal suture.
E. defines the anterior width of the dental arch.

Nr 122. Transposition of teeth:
A. is the displacement of the teeth outside the oral cavity.
B. is the change of the position of a tooth around its long axis.
C. is the displacement of a tooth along the dental arch with the change of teeth sequence.
D. is a local factor of the congenital absence of teeth.
E. consists in the position of a tooth germ outside the alveolar process.

Nr 123. The biometric field is limited by:
A. the frontal Kantorowicz-Izard’s plane.
B. the Frankfurt horizontal plane.
C. the sagittal plane.
D. the anterior cranial base plane.
E. the mandibular plane.

Nr 124. In open bite treatment using functional appliances:
A. loops pushing the tongue back are indicated.
B. the construction bite is made with the maximum backward movement of the mandible.
C. when making the construction bite it is necessary to coincide the upper and lower incisal midlines.
D. the construction bite is taken with the edge to edge incisal contact.
E. the posterior teeth are released from acrylic.

Nr 125. In mature (adult) type of swallowing:
1) the mandible is stabilized by oro-facial muscle contraction;
2) the mandible is stabilized by the contact of the tongue with the lip;
3) the tongue is in the proper oral cavity;
4) the upper and lower teeth occlude;
5) the swallowing takes place while the dental arches are parted (non-occlusion);
6) the mandible is stabilized by the contraction of the muscles that lift the lower jaw.
The correct answer is:

Nr 126. Partial deep bite (supraocclusion) is characterized by:
A. two-level occlusal plane.
B. greater distance (divergence) between the bases of the jaws.
C. more obtuse gonial angle.
D. bigger anterior growth of the maxilla in relation to the cranium.
E. lower incisal midline shift.
Nr 127. The Ludström index is useful in the assessment of:
A. proper height of the lower face.
B. discrepancy between the width of the teeth and the dental arch length.
C. degree of crowding in lower dental arch.
D. dental arch width.
E. relationship between the total width of the upper permanent incisors and the total width of the lower permanent incisors.

Nr 128. The extraction of the premolars in orthodontics is justified in the case of:
A. correction of class III with negative test of moving the mandible backward.
B. treatment of deep bites.
C. patients with the lips positioned away from the Ricketts’ esthetic line.
D. treatment of supraocclusion complicated with the lack of space for the upper canines.
E. skeletal open bite treatment with the backward rotation of the mandible.

Nr 129. The lack of acrylic in the region of the anterior segment of the dental arches is the construction feature of:
A. Klammt’s appliance.
B. Andresen’s activator.
C. Lehman’s appliance.
D. Schwarz’s active plate.
E. Karłowska’s appliances.

Nr 130. The assessment of the size and shape of the cervical vertebrae is useful to determine:
A. peak of growth of the mandible.
B. congenital type of cranium anatomy.
C. dental age.
D. predicted maxillary growth.
E. skeletal class.

Nr 131. According to orthodontic standards, vertical stripping of the teeth:
A. is allowed only for permanent incisors.
B. can be applied in the cases of crowding of both primary and permanent teeth.
C. is always contraindicated.
D. is allowed only when orthodontic treatment is completed.
E. is allowed only for permanent molars.

Nr 132. What is considered as the dysfunction in orthodontics?
1) habitual breathing through the nose;
2) habitual breathing through the mouth;
3) tongue thrust swallowing;
4) dummy sucking;
5) thumbsucking.

The correct answer is:
A. 1,3.
B. 1,4.
C. 2,3.
D. 2,5.
E. 4,5.

Nr 133. Inherited skeletal-dental abnormalities include:
A. prognathic mandibles.
B. prognathic maxillae.
C. supranumerary teeth.
D. hypodontia.
E. all the above.
Nr 134. Prolonged dummy sucking habit can lead to:

1) class II malocclusion;  
2) class III malocclusion;  
3) deep bite;  
4) open bite;  
5) constriction of the maxilla.

The correct answer is:

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

Nr 135. Fill in the gap in the sentence: “About eight week of pregnancy the fetus head should upright dorsally. It it does not happen, .... syndrome will develop”.

A. Crouzon.  
B. Apert.  
C. Turner.  
D. Pierre Robin.  
E. Klinefelter.

Nr 136. The incompetent lips in Class II malocclusion may intensify:

A. upper incisor protrusion.  
B. upper incisor rotation.  
C. upper incisor retrusion.

D. upper incisor distoinclination.  
E. upper incisor mesioinclination.

Nr 137. Class II malocclusion can be caused by:

A. thumsucking.  
B. habitual mouth breathing.  
C. tongue thrust swallowing.

D. B,C are correct.  
E. A,B,C are correct.

Nr 138. What is the percentage of environmental factors, such as radiation, drugs or alcohol, in cleft palate development?

A. 0%.  
B. 20%.  
C. 50%.  
D. 70%.  
E. 100%.

Nr 139. After a drift of the teeth due to premature loss of the primary teeth a lack of space for eruption is usually observed for the following teeth:

1) lower canine;  
2) upper canine;  
3) lower first premolar;  
4) upper first premolar;  
5) lower second premolar;  
6) upper second premolar.

The correct answer is:

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

Nr 140. Premature loss of upper second primary molar may cause:

1) scissors bite;  
2) upper second premolar retention;  
3) midline shift;  
4) upper first molar rotation.

The correct answer is:

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

Nr 141. Which of the following are the parameters describing retentive area:

A. length, width, inclination angle.  
B. inclination angle, the depth of undercut.  
C. length, width, depth, the degree of deepening.  
D. length, width, the position of the top of contour.  
E. position of the top of contour.
Nr 142. The proper mandible-maxilla relation during central occlusion registration can be named:

1) static occlusion;  
2) maximal incuspidation;  
3) protrusion position;  
4) laterotrusion position;  
5) muscle position.

The correct answer is:

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

Nr 143. Which of the following methods is the most efficient while performing central occlusion registration?

A. anatomo-physiological.  
B. anthropometric.  
C. aesthetic.  
D. swallowing reflex.  
E. phonetic.

Nr 144. Which of the following impression materials rank among the elastic materials?

1) silicone impression materials;  
2) zinc oxide-eugenol paste;  
3) polyether impression material;  
4) polysulfide impression materials;  
5) impression plaster.

The correct answer is:

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

Nr 145. Post and core is indicated for:

1) single-rooted teeth;  
2) only multi-rooted teeth;  
3) endodontically treated teeth;  
4) multi-rooted teeth with parallel roots only;  
5) single- and multi-rooted teeth, also for non-parallel roots.

The correct answer is:

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

Nr 146. A partial removable denture has been planned for the patient with A2 class dental defects according to Eichner. The first visit should include:

A. anatomical impression and shade selection.  
B. anatomical impression.  
C. anatomical impression, occlusion registration and shade selection.  
D. anatomical impression for the individual tray.  
E. occlusion and articulation registration.

Nr 147. The central occlusion registration in edentulous patients may be performed by means of the swallowing method. This test is based on the assumption that:

A. teeth remain in close contact in the terminal phase of the swallowing.  
B. swallowing has no relation with teeth contact.  
C. swallowing is a part of mastication process.  
D. it does not require doctor’s experience, because swallowing is a reflex action.  
E. it allows to register precisely the occlusion height without using other methods.
Nr 148. What is the treatment sequence for making clasp-retained partial dentures?

1) try-in with teeth in wax;  4) surveying the master cast;
2) central occlusion registration;  5) denture delivery;
3) making anatomical impression;  6) frame try-in, shade selection.

The correct answer is:
A. 3,4,1,2,6,5.   B. 3,2,4,6,1,5.   C. 3,4,2,6,1,5.   D. 4,3,6,1,2,5.   E. 3,2,4,1,6,5.

Nr 149. An indispensable condition for post and core fabrication is:
A. filling root canals using eugenol-free material.
B. adequate endodontic treatment confirmed by radiographic examination.
C. adequate root canal enlargement obtained during endodontic treatment, so no additional mechanical canal enlargement is necessary.
D. filling root canals using phosphate cement.
E. endodontic retreatment independent of the quality of root canal filling.

Nr 150. Metal framework try-in should be performed in the oral cavity during the fabrication of a porcelain-fused-to-metal bridge. A correctly fabricated metal framework:
A. contacts with the oral mucosa in the vestibular area of the oral cavity in part of the span.
B. contacts with the oral mucosa in the oral cavity proper in part of the span.
C. restores contact points with adjacent teeth.
D. does not contact with the oral mucosa in part of the span.
E. exhibits elastic properties.

Nr 151. The metal crown should be made to improve clasp retention in clasp-retained partial denture. In this case the crown should be made of:
B. chromium-nickel alloy.    E. all the above mentioned materials can be used in this case.
C. chromium-cobalt alloy.

Nr 152. The face bow is a device used for:
A. central occlusion registration.
B. prosthodontic plane determination.
C. mastication movement simulation.
D. registration of free lateral movements of the mandible.
E. transfer of data concerning spatial relation of the occlusal plane to the temporomandibular joint hinge axis.

Nr 153. The mandible elevation movement results from the bilateral contraction of:
A. masseter, medial pterygoid and temporal muscles.
B. masseter, lateral pterygoid and digastric muscles.
C. medial pterygoid, lateral pterygoid and suprahyoid muscles.
D. masseter, lateral pterygoid and digastric muscles.
E. temporal, medial pterygoid and lateral pterygoid muscles.
Nr 154. The term central occlusion refers to:
A. proper alignment of the condylar heads in the temporomandibular joint fossae.
B. mutual alignment of the occlusal surfaces of the opposing teeth with uniform, multi-pointed contact in the lateral teeth area at physiological occlusion height.
C. mutual alignment of the occlusal surfaces of the opposing teeth in the rest position of the mandible.
D. retruded contact position of the occlusal surface of the opposing teeth.
E. mutual alignment of the occlusal surfaces tooth of the tooth arches in relation to the hinge axis.

Nr 155. The intraoral graphic registration method is used to record the mandible movement in the horizontal plane. A tracing stylus draws a figure called “gothic arch”. The gothic arch arms determine:
A. retruded contact position of the mandible.  
D. range of free mandible movements.
B. range of border lateral movements.  
E. range of the border opening.
C. range of border protrusion movement.

Nr 156. During mandibular lateral excursion, the laterotrusive-side condyle can move:
1) around the vertical axis; 2) laterally; 3) posteriorly; 4) anteriorly.
The correct answer is:
A. 1,2,4.  
B. 1,2,3.  
C. 2,3,4.  
D. 1,3,4.  
E. all the above.

Nr 157. During normal chewing, the mandible can adopt the following border positions:
1) retruded contact position; 2) maximum mandibular protrusion; 3) maximum opening of the mandible; 4) most lateral position.
The correct answer is:
A. only 1.  
B. 1,3.  
C. 1,4.  
D. 1,3,4.  
E. all the above.

Nr 158. Which of the following methods are functional closed mouth impression techniques?
1) Marxkors technique;  
4) Reinchenbach technique;  
2) Płonka technique;  
5) Campagne technique;  
3) Kozłowski technique;
The correct answer is:
A. 1,2.  
B. 1,2,3,5.  
C. 1,5.  
D. 1,2,5.  
E. 1,2,4.

Nr 159. The repositioning splint should be used by the patient:
1) at night and periodically during the day; 4) up to 24 months;
2) round-the-clock; 5) up to 8 weeks.
3) only in the case of psychomotor hyperactivity;
The correct answer is:
A. 1,4.  
B. 3,4.  
C. 2,5.  
D. 1,5.  
E. 2,4.

Nr 160. Which of the following muscles are responsible the retrusive mandibular movement:
1) digastrics muscles; 4) deep fibres of masseter muscles;  
2) mylohyoid muscles; 5) anterior fibres of temporal muscles;  
3) geniohyoid muscles;
The correct answer is:
A. 1,2,4.  
B. 1,2,3.  
C. 1,2,3,4.  
D. 1,2,3,5.  
E. all the above.
Nr 161. The optimal preparation of the coronal part of the tooth for cast metal dowel includes:

A. oblique cutting of the vestibular surface toward gingiva.
B. cutting of the supragingival surface perpendicularly to the long axis of the tooth at the gingival level.
C. oblique cutting of the vestibular and lingual surface at 45 degrees toward gingiva.
D. preservation of sound tooth structures of the clinical crown prepared for the prosthetic crown and cut perpendicularly to the long axis of the tooth.
E. preservation of sound tooth structures of the clinical crown prepared for the prosthetic crown and cut obliquely toward gingiva.

Nr 162. In the indirect method of cast dowel fabrication, the following impression techniques can be used:

1) selective pressure impression technique with zinc-oxyde eugenol material;
2) double layer two-stage impression technique with polyether material;
3) double layer one-stage impression technique with vinylpolysiloxane material;
4) extensive functional impression with vinylpolysiloxane material;
5) double layer one-stage impression technique with C-silicone material.

The correct answers is:

Nr 163. The elevation of the mandible is controlled by bilateral contraction of:

1) lateral pterygoid muscles;  4) temporal muscles;
2) medial pterygoid muscles;  5) digastric muscles;
3) masseter muscles;  6) mylohyoid muscles.

The correct answer is:
A. 3,4,5.  B. 1,3,4.  C. 2,3,4.  D. 2,3,5.  E. all the above.

Nr 164. To fabricate inlays in Cerec system, the following equipment is necessary:

1) milling machine;  4) vacuum pressure induction furnace;
2) computer with software;  5) cnc (computer numerical control) machine;
3) intraoral scanner;  6) ceramization furnace.

The correct answer is:

Nr 165. The plate of an upper tissue-borne removable partial denture can be reduced if:

1) only teeth 15,14, 13 remain in maxilla;
2) lower natural teeth are present;
3) natural teeth 43-33 and bridges 37-34, 46-44 are present;
4) lower partial denture is present;
5) lower complete denture is present.

The correct answer is:
Nr 166. Abnormal pattern of breathing occurring, e.g., in diabetic ketoacidosis-metabolic acidosis is called:
A. Cheyne-Stokes respiration.       D. tachypnea.
B. Biot’s respiration.              E. none of the above.
C. Kussmaul breathing.

Nr 167. Spinal cord injury should be suspected in:
A. near-drowning patient after plunging into the water.
B. unconscious patient after falling from heght.
C. pedestrian after a traffic collision.
D. in a cut off hanged person.
E. all the above.

Nr 168. After accident a cyclist with the head trauma and retrograde amnesia presents at ER with GSC 15 (Glasgow coma score). One should suspect:
A. subdural hematoma.       D. head injury.
B. epidural hematoma.       E. all the above.
C. concussion.

Nr 169. In risk evaluation of which pathology the Geneva score proves useful?
A. deep vein inflammation.       D. cardiac infarction.
B. pulmonary embolism.          E. all the above.
C. head injury.

Nr 170. Greenstick fracture is usually observed in:

Nr 171. While performing CPR within 2 minutes you should deliver about:
A. 4 cycles of 30 compressions and 2 rescue breaths.
B. 5 cycles of 30 compressions and 2 rescue breaths.
C. 6 cycles of 30 compressions and 2 rescue breaths.
D. 5 cycles of 2 compressions and 30 rescue breaths.
E. there is no correct answer.

Nr 172. Every minute of delay defibrillation reduces the probability of survival to discharge from hospital by:
A. 1–2%.  B. 4–5%.  C. 10–12%.  D. 14–16%.  E. 18–20%.

Nr 173. T in MNOPRTS algorithm stands for:
A. moniToring.  D. TransportatIon.
B. oxygenatIon.  E. there is no correct answer.
C. sedatIon.
Nr 174. The term ‘NSTEMI – Acute Coronary Syndrome’ includes:
A. infarction without ST elevation.  D. answers A,B,C are correct.
B. unstable angina.  E. answers A and B are correct.
C. infarction with ST elevation.

Nr 175. Positive end-expiratory pressure during mechanical ventilation is denoted as:
A. SIMV.  B. PEEV.  C. PEEP.  D. BEEP.  E. ECMO.

Nr 176. A patient may raise an objection to the opinion or judgment rendered by a dentist and lodge it with the Medical Committee working at:
A. Minister of Health.
B. regional professional liability screener.
C. president of the regional chamber of physicians and dentists.
D. Patient Ombudsman.
E. relevant voivod.

Nr 177. A dentist is allowed to disclose all information about his patients and their environment that he has acquired in the course of his professional activities:
A. always if the dentist considers it to be the right thing to do.
B. to any other dentist or physician.
C. to any person assisting the dentist at work or helping the dentist at professional activities.
D. after obtaining patient's consent.
E. always after patient's death.

Nr 178. A judgment of the regional medical court may be appealed by the parties to:
A. Chamber of Civil and Labour Law of the Supreme Court.
B. Criminal Division of the Regional Court in Warsaw.
C. Supreme Medical Court.
D. president of the regional medical chamber.
E. Department of Supervision and Complaints of the Ministry of Health.

Nr 179. Under the act on professions of the physician and dentist, each dentist has the right to and duty of professional development. The fulfillment of this obligation requires collecting the so called educational credits according to the following principle:
A. at least 100 credits in 12 months.  D. at least 200 credits in 48 months.
B. at least 100 credits in 48 months.  E. at least 300 credits within 36 months from obtaining the license to practice dentistry.
C. at least 200 credits in 24 months.

Nr 180. Does the Polish Code of Medical Ethics describe exemptions from medical confidentiality?
A. no.  D. it refers to the criminal law.
B. only in legal cases.  E. only in the cases of genetics.
C. yes.
Nr 181. Which of the international rules concerning the conduct of clinical trials a dentist must observed?
A. WWC principles. D. private terms and conditions.
B. BA principles. E. principles of the trade union of doctors.
C. GCP principles.

Nr 182. Does the European Convention on Bioethics contain a provision concerning trading of human body and its parts?
A. it does not contain such a provision.
B. it prohibits trading human body and its parts.
C. it accepts such a trade.
D. it allows to sell human body and its parts in specific cases.
E. it leaves the decision to the lawyer.

Nr 183. Does the Polish Code of Medical Ethics contain a provision prohibiting advertising for dental activity?
A. it does not contain such a provision.
B. it contains a prohibition of advertising in dentistry.
C. it leaves the decision to the dentist.
D. it leaves the decision to administration.
E. it leaves the decision to publishers.

Nr 184. Does the Hippocratic Oath contain a provision concerning medical confidentiality?
A. it contains provision prohibiting such confidentiality.
B. it suggests observing medical confidentiality.
C. it does not contain such a provision.
D. it leaves the decision on medical confidentiality to the state authorities.
E. it limits the medical confidentiality to surgeons only.

Nr 185. The European Convention for the protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine declares that:
A. every medical intervention may be carried out according to the decision of the physician.
B. every medical intervention may be carried out on the order of the supervisors without observing the patient’s will.
C. medical intervention may only be carried out after the person concerned has given free and informed consent to it. This person should beforehand be given appropriate information as to the purpose and nature of the intervention as well as on its consequences and risks.
D. medical intervention may be carried out without the informed consent if it constitutes no risk to the life.
E. medical intervention may be carried out without the informed consent in the case of minor.
Nr 186. Social pension is not granted to a person who bears the medical ruling on total incapacity to work due to the impairment of the body which arose:

A. during studies for fellowship in science.
B. during doctoral studies.
C. during employment.
D. during high school or university period before the age of 25 years.
E. before the age of 18 years.

Nr 187. In accordance with the Law on cash benefits from social insurance in the case of disease and maternity, medical rulings on temporary incapacity to work due to disease or the necessity to provide personal care for a sick member of the employee’s family are issued:

A. on the basis of the information card from the hospital.
B. on the basis of the medical ruling from the medical specialist.
C. on the basis of the medical ruling from emergency ambulance service.
D. after carrying out a direct medical examination of the insured employee or their sick family member.
E. on the basis of the information card from the sanatorium.

Nr 188. In accordance with the Law on cash benefits from social insurance in the case of disease and maternity, a medical ruling on temporary incapacity to work is issued with two copies. The issuing person should handle the original in the following way:

A. give it to the insured person.
B. send it to the employer.
C. keep it for the period of three years.
D. send it to a local branch of SIF (ZUS) within three days from the date of the issuing.
E. send it to a local branch of SIF (ZUS) within seven days from the date of the issuing.

Nr 189. The medical ruling on temporary incapacity to work is a confidential document. Its form belongs to SIF (ZUS) which makes it available to:

A. hospital administrators.
B. medical unit managers.
C. medical specialists.
D. SIF (ZUS) certifying doctors.
E. doctors authorized by SIF (ZUS) to issue such a ruling.

Nr 190. In accordance with the Law on old age and disability pensions paid from the social insurance fund an insured person, who has the required contributory period, is entitled to training pension if in their case the following has been stated:

A. partial incapacity to work.
B. desirability of retraining due to total incapacity to work.
C. temporary incapacity to work.
D. desirability of retraining due to incapability to work in their current job.
E. total incapacity to service but capacity to work.
Nr 191. How many days of compulsory continuous sickness insurance in SIF (ZUS) an insured person needs to be entitled to receive sickness benefit?
A. 30.  B. 60.  C. 90.  D. 100.  E. 120.

Nr 192. If temporary incapacity to work occurred as a result of an accident at work, on the road to or from work, or as a result of occupational disease then the monthly sickness benefit amounts to the following percentage calculated of the base of the insurance contributions:
A. 100%.  B. 90%.  C. 80%.  D. 70%.  E. 50%.

Nr 193. The infectious diseases which require compulsory hospitalization include:

Nr 194. In the case of diseases whose outset is difficult to determine and whose duration is relatively long, e.g. parodontosis, the epidemiological assessment may make use of the following entities:

Nr 195. National health programs implemented in Poland are financed from:
A. compulsory health insurance contributions.  B. state budget.  C. voluntary health insurance contributions.  D. private funds.  E. all the above.

Nr 196. Which of the following are risk factors for lifestyle diseases?
1) low physical activity;
2) male gender;
3) alcohol abuse;
4) age;
5) high calorie diet rich in saturated fats and cholesterol;
6) smoking.
The correct answer is:
A. 1,2.  B. 1,4.  C. 1,2,4,5.  D. 1,3,5,6.  E. 1,2,3,4,5.

Nr 197. Basic demographic trends which have implications for health care systems in Europe include:
1) systematic increase in the average length of life of societies;
2) decrease in population of people over 65;
3) low birth rate;
4) increase in both stationary and outpatient medical care needs of communities;
5) decline of both rehabilitation and social assistance needs.
The correct answer is:
A. 1,2.  B. 4,5.  C. 1,3,4.  D. 2,3,5.  E. 1,2,3.
Nr 198. A retrospective analysis of the dynamics of caries in the population of Polish children 6 and 12 years old from urban and rural areas carried out in 1979 – 2008 shows that the differences between those groups in caries incidence and especially its intensity which were observed 20 years ago:

A. now almost stop exist in both populations.
B. have drastically increased to the disadvantage of six-year-old children from rural areas.
C. have drastically increased to the disadvantage of six-year-old children from urban areas.
D. have drastically increased to the disadvantage of twelve-year-old children from rural areas.
E. have drastically increased to the disadvantage of twelve-year-old children from urban areas.

Nr 199. The notion that public health is a multi-sectoral field means:

A. all sectors of health care are involved in task execution.
B. different entities of government administration deal with it.
C. public health tasks are carried out by the Ministry of Health in cooperation with non-governmental organizations.
D. public health tasks are carried out not only by the Ministry of Health and health care facilities but also by the other public, state and local administrations with their subordinate services and NGOs.
E. different medical disciplines deal with it.

Nr 200. A health insurance physician’s referral is required to gain access to outpatient specialist services financed from public funds. Such a referral is not required in the case of:

A. people with tuberculosis.
B. dental services.
C. people infected with HIV.
D. war invalids, disabled soldiers and veterans.
E. all the above.

Thank you!