

Nr 1. Which reaction describes setting of resin modified glass ionomer cements?

- A. polymerization.
- B. acid-base reaction.
- C. polymerization and classic acid-base reaction.
- D. polymerization or acid-base reaction.
- E. condensation polymerization.

Nr 2. Which of the following changes in the properties of resin composite materials is observed with increasing amount of filler in the materials?

- A. increase in the compressive strength.
- B. increase in the polymerization shrinkage.
- C. increase in water sorption.
- D. increase in thermal expansion.
- E. decrease in the modulus of elasticity.

Nr 3. Which of the listed base materials is characterized by both the weakest mechanical properties, and the highest solubility in water as well as possesses antibacterial and odontotropic properties?

- A. glass ionomer cement.
- B. zinc phosphate cement.
- C. zinc oxide-eugenol cement.
- D. zinc polycarboxylate cement.
- E. calcium hydroxide-based cement.

Nr 4. A 56-year-old male patient during endodontic treatment of the tooth 36 has suddenly felt spontaneous severe pain in the lower jaw on the left side. The pain is radiating to the left arm and shoulder. Anesthesia was applied (inferior alveolar nerve block) but the pain persists and begins to grow. What should be done in this situation?

- A. described pain is characteristic of odontogenic pain of pulpal origin that can be caused by the vital pulp of the treated tooth 36; the patient should be calmed and endodontic treatment continued.
- B. described pain is characteristic of cardiac pain; treatment should be interrupted, the patient should be positioned vertically (sitting or half-sitting position) and nitroglycerin should be applied.
- C. described pain is characteristic of cardiac pain; treatment should be interrupted, the patient should be in a supine position and nitroglycerin should be applied.
- D. described pain has a psychogenic source, the patient should be calmed and treatment should be continued.
- E. described pain is neuropathic, neuromuscular depolarizing agent should be applied and treatment should be postponed.

Nr 5. Indicate the **false** statement concerning the lateral condensation of gutta-percha:

- A. it is a common obturation method widely used for years.
- B. excessive force applied during the procedure can lead to a horizontal fracture of the root.
- C. spreader used for obturation should be 1-2 mm shorter than the working length.
- D. it is not a recommended technique for the cases with internal resorption.
- E. if the technique is properly employed the lateral canals can be filled with sealer.

Nr 6. The needle of an endodontic syringe during root canal irrigation should be inserted:

- A.** to a depth of 1-2 mm shorter than working length.
- B.** as deeply as possible.
- C.** half the length of the root canal.
- D.** to a depth of the apical constriction.
- E.** 5 mm from the root canal orifice.

Nr 7. Pulpotomy is a procedure involving:

- A.** surgical removal of the entire coronal pulp, leaving intact the vital radicular pulp within the canals.
- B.** removal of necrotic pulp tissue followed by the preparation and obturation of root canals with gutta-percha and sealer.
- C.** pulp incision in order to evacuate pus from the abscess of endodontic origin.
- D.** painless pulp devitalisation of permanent teeth.
- E.** none of the above.

Nr 8. Recapitulation is a procedure involving:

- A.** reintroduction of the master apical file (MAF) to the full working length.
- B.** reintroduction of the biggest instrument used in the step-back technique.
- C.** reintroduction of the biggest instrument used in the crown-down technique.
- D.** reintroduction of the smallest instrument to the level of the canal curvature.
- E.** inspection of root canal orifices.

Nr 9. Choose the **false** sentence concerning the basic principles of root canal instrumentation:

- A.** files always work in a canal filled with irrigant.
- B.** copious irrigation is carried out between each change of file size.
- C.** exploration is always done with smaller files to gauge canal size and configuration.
- D.** recapitulation is done to loosen debris by often returning to working length and rotating the MAF.
- E.** recapitulation is done in order to enlarge the root canal and plan the walls with larger file than MAF.

Nr 10. A procedure that involves vertical cut through a mandibular molar crown into a furcation with a fissure bur resulting in a complete separation of the roots and the creation of two separate crowns is called:

- A.** radisection.
- B.** root amputation.
- C.** bicuspidation.
- D.** tunnel method.
- E.** root resection.

Nr 11. Adjust clinical features to periradicular pathologies listed below:

- 1) acute apical periodontitis;
- 2) chronic apical periodontitis;
- 3) chronic apical abscess;
 - a) no symptoms of pain, possible sensitivity to palpation; resorption of the lamina dura or extensive destruction of periradicular tissues on periapical X-ray, no changes on the oral mucosa in the periapical area;
 - b) usually no symptoms of pain, there is a sinus tract stoma on the oral mucosa and destruction on X-ray;
 - c) moderate to severe spontaneous discomfort as well as pain on mastication, thickening of periodontal ligament, no other changes on X-ray.

The correct answer is:

- A.** 1a,2b,3c. **B.** 1a,2c,3b. **C.** 1b,2c,3a. **D.** 1c,2a,3b. **E.** 1c,2b,3a.

Nr 12. Direct dentin stimulation, such as cold, heat and electricity, determine the response to stimuli and can identify the offending tooth by an abnormal response.

What would be **the most probable** interpretation of different pulp vitality tests?

- 1) presence of a response; sudden, sharp sensation while performing the test of drilling;
- 2) absence of a response while performing the test of drilling;
- 3) intense and prolonged presence of the response for cold test;
 - a) caries lesion, the pulp contains vital tissue;
 - b) the pulp necrosis;
 - c) irreversible pulpitis.

The correct answer is:

- A.** 1a,2b,3c. **B.** 1b,2a,3c. **C.** 1c,2b,3a. **D.** 1c,2a,3b. **E.** 1a,2c,3b.

Nr 13. A 35-year-old patient was complaining of spontaneous pain of the tooth 23. The pain had been lasting for 4 days. During examination the practitioner diagnosed deep carious cavity. When cold test was performed the patient complained about prolonged sharp pain. X-ray showed no periapical pathology. What would be the most adequate plan of treatment on the first visit?

- A.** local anesthetic, preparation of the cavity and pulp capping of carious exposure with calcium hydroxide liner and restoration of the cavity with composite material.
- B.** local anesthetic, trepanation of the tooth and leaving it open for one day.
- C.** local anesthetic, rubber dam placement, preparation of carious cavity opening of the pulp chamber, vital pulpectomy, final obturation of the root canal, control X-ray, restoration of the tooth with composite material.
- D.** rubber dam placement, root canal treatment without anesthetic, obturation of the root canal with calcium hydroxide paste a leaving temporary dressing for 3 weeks.
- E.** preparation of the cavity, placement of pulpomixine paste in the cavity and restoration of the tooth with composite material.

Nr 14. The tooth 24 needs endodontic treatment because of periapical pathology. During clinical examination of the tooth a dentist diagnosed class V deep caries subgingival cavity exposing the pulp chamber. What is the proper plan of treatment?

- A.** endodontic treatment first and after obturation of the root canal, restoration of class V cavity.
- B.** restoration of class V cavity first with simultaneous creation of an access for endodontic treatment through the gingival surface; placing a tight fitting file in the canal in order to avoid restorative material block the canal space.
- C.** the dentist can freely choose the sequence of treatment plan because there is no need to restore class V cavity before endodontic treatment.
- D.** an access to the pulp chamber may be created from the class V cavity and there is no need to do another preparation.
- E.** if a dentist is planning to place rubber dam, there is no need to restore class V cavity first.

Nr 15. Match sealer with the group:

1) AH plus; 2) endomethasone N; 3) apexit; 4) Ketac-Endo.

a) plastics; b) glass ionomer; c) calcium hydroxide; d) zinc-oxide eugenol.

The correct answer is:

- A.** 1a,2b,3c,4d. **B.** 1a,2d,3c,4b. **C.** 1b,2a,3c,4d. **D.** 1b,2c,3d,4a. **E.** 1c,2a,3b,4d.

Nr 16. Choose the proper answer concerning the following sentences:

- 1) electronic apex locators are useful for identifying perforations, root fractures, main canal ramifications;
- 2) if a perforation is present, there is a positive reading while a file is inserted into the area of the perforation;
- 3) apex locators do not replace radiographic techniques, but they are a good supplement to them.

The correct answer is:

- A.** sentences 1 and 2 are false, 3 is true.
- B.** sentences 1 and 3 are true, 2 is false.
- C.** sentences 1 and 2 are true, 3 is false.
- D.** sentence 1 is false, 2 and 3 are true.
- E.** all sentences are true.

Nr 17. Which canal sealers have the following characteristics: staining, very slow setting time, non-adhesion and solubility?

- A.** zinc oxide-eugenol-based sealers.
- B.** epoxy resin sealers.
- C.** calcium hydroxide sealers.
- D.** glass ionomer sealers.
- E.** sealers containing medicaments.

Nr 18. Which of the following is the minimal size of the file to which the canal should be enlarged in order for the irrigating solution to effectively reach the apical portion of the canal?

- A.** 15. **B.** 20. **C.** 25-35. **D.** 45. **E.** 50

Nr 19. The C-shaped canals classified according to Melton can be found in:

- A. all teeth.
- B. lower molars.
- C. upper molars.
- D. lower premolars.
- E. upper premolars.

Nr 20. Indicate the **false** statement concerning the age changes occurring in the dental pulp and dentin:

- A. secondary dentin is deposited throughout life; as a result, both the pulp chambers and root canals become smaller; however, they are always seen on radiographs.
- B. the permeability of the dentin is reduced due to peritubular dentin occluding the dentinal tubules.
- C. the pulpal tissue itself becomes less cellular and less vascular and contains fewer nerve fibers.
- D. between the ages of 20 and 70, the cell density decreases by approximately 50%.
- E. all the statements are correct.

Nr 21. How long should a laterally luxated tooth be splinted for, if the patient came directly after the accident:

- A. 1 week.
- B. up to 2 weeks.
- C. between 2 and 4 weeks.
- D. up to 2 months.
- E. splinting is not advised at all.

Nr 22. Which endodontic irrigant is the most effective one in eradicating *Enterococcus faecalis*?

- A. sodium hypochlorite.
- B. citric acid.
- C. chlorhexidine.
- D. EDTA.
- E. hydrogen peroxide.

Nr 23. A patient came to the office complaining about extreme tenderness of the tooth 26 on biting and the feeling of hyperocclusion. During clinical examination a vast restoration and slight mobility of the tooth 26 are observed. The tooth does not react to cold, heat or drilling test. What will be the proper management of the tooth on emergency visit?

- A. antibiotic administration and root canal treatment.
- B. drainage performed through an incision in vestibular region.
- C. access preparation to the canal system and antibiotic administration.
- D. chemomechanical preparation of the chamber and canal.
- E. removal of the restoration and placement of temporary material.

Nr 24. A 34-year-old patient presents with complaints of sharp, short pain of the teeth 44 and 45 during consumption sweet and cold foods. The pain lasts usually several seconds and appears sometimes during toothbrushing (the patient uses a hard toothbrush). Intraoral examination reveals class I restoration in the tooth 44 in a good state and exposed necks of the teeth 44 and 45 with small abrasion of hard tissues in the gingival region. What may be the cause of the patient's complaints?

- A. root caries in the teeth 44 and 45.
- B. secondary caries beneath the restoration in the tooth 44.
- C. reversible pulpitis.
- D. irreversible pulpitis.
- E. dentin hypersensitivity.

Nr 25. Indicate the endpoint to which, according to modern endodontic rules, you perform shaping, cleaning and obturation of the root canal:

- A. shaping and cleaning – anatomic apex, obturation – radiographic apex.
- B. shaping, cleaning and obturation – anatomic apex.
- C. shaping, cleaning and obturation – radiographic apex.
- D. shaping, cleaning and obturation – apical constriction.
- E. shaping and cleaning – apical constriction, obturation – anatomic apex.

Nr 26. What procedure should be carried out in the case of internal resorption located in the middle of the root length, diagnosed on the basis of an X-ray?

- A. tooth monitoring.
- B. endodontic treatment with the root canal obturation with sealer only to fill properly the cavity created in the canal.
- C. endodontic treatment with root canal obturation using the method of lateral condensation of gutta-percha.
- D. two-stage endodontic treatment – in the first stage filling the root canal with non-hardening calcium hydroxide material for a few days, and in the second stage the root canal obturation using thermoplastic method.
- E. tooth extraction.

Nr 27. The panoramic radiograph of a 30-year-old patient shows a translucency within the root canal of the tooth 21. The patient does not have any complaints connected with this tooth; however, his dental history provides information that he experienced trauma in the region of the anterior teeth some years ago. The X-ray of periapical region reveals the same lesion as the panoramic radiograph – oval widening of the root canal in the middle part of the root, symmetrical to the long axis of the tooth, without any contact with periodontal ligament space. What is your diagnosis?

- A. widening of the root canal system that does not need any treatment.
- B. invaginated tooth.
- C. chronic periodontitis with an intracanal abscess.
- D. root canal resorption due to copious irrigation with EDTA.
- E. internal root resorption.

Nr 28. Find the statement properly describing the pulp chamber floor and pulp chamber roof in posterior teeth?

- A. the pulp chamber floor is white, while the roof is yellow.
- B. the pulp chamber floor is dark grey and uneven, while the roof is white and even.
- C. the pulp chamber floor is even, while the roof is uneven.
- D. the pulp chamber floor is soft, while the roof is hard.
- E. there is no difference in colour and consistency between pulp chamber floor and roof; they are only different distances from the occlusal surface.

Nr 29. A butterfly-type clamp is used for:

- A. restoring cavities class II according to Black in the posterior teeth.
- B. restoring cavities class V according to Black.
- C. treating dental caries with the use of ART method.
- D. isolation of the anterior teeth with the use of a rubber dam.
- E. taking bite-wing radiographs in caries diagnosis on proximal surfaces.

Nr 30. During endodontic treatment of the tooth 14 in a 27-year-old patient after removal of the chamber roof and preparation of the pulp chamber the canal orifice is discovered in the centre of the pulp chamber floor. What should you do next?

- A. repair the perforation – the “orifice” found on the pulp chamber floor is surely the perforation, because maxillary first premolars have always 2 canals – buccal and palatal.
- B. search for the second canal in the buccal or palatal direction.
- C. search for the second canal in the mesial or distal direction.
- D. search for remaining two canals mesially and distally from the discovered orifice, because an orifice located centrally may be the evidence of 3 canals.
- E. prepare and obturate the discovered root canal, because an orifice located centrally is the evidence of only 1 canal in this tooth.

Nr 31. A 45-year-old patient presented with spontaneous pain of the tooth 35. Clinical examination demonstrated large class II restoration according to Black in this tooth, negative response to cold test, increased reaction to vertical percussion. The X-ray showed the restoration reaching the pulp chamber and no lesions in the periapical region. Medical history provides information that the patient has congenital heart disease. What should you propose?

- A. tooth monitoring during the next week.
- B. direct pulp capping.
- C. endodontic treatment.
- D. endodontic treatment with antibiotic prophylaxis.
- E. tooth extraction due to reported heart disease.

Nr 32. In which of the following cases the use of the electronic apex locator may be dangerous for the patient?

- A. presence of a metal crown in the oral cavity.
- B. an implanted cardiac pacemaker.
- C. endodontic treatment of an immature tooth.
- D. presence of irrigating solution inside the root canal.
- E. electronic apex locators are entirely safe for the patients and there are no contraindications to their use.

Nr 33. What concentration of sodium hypochlorite provides proper antibacterial effect and concurrently has a low toxicity?

- A. 0,2%. B. 0,5%. C. 1%. D. 2%. E. 5,25%.

Nr 34. What should be the direction of round bur motions/strokes during the removal of pulp horns in the posterior teeth?

- A. from the occlusal surface to the pulp chamber floor.
- B. from the pulp chamber floor to the occlusal direction.
- C. the bur should be put directly in the place where you expect a pulp horn.
- D. pulp horns may be left without any preparation if they do not impede the access to the canal orifices.
- E. no answer is true.

Nr 35. A yellowish lesion, soft on explorer examination, and around 0.6mm deep was discovered on the lingual surface of the tooth 46, in a patient with high caries activity. The restorative material of choice in this case will be:

- A. amalgam because of the bacteriostatic activity of silver.
- B. glass-ionomer because it doesn't need extra retention and releases fluoride ions.
- C. hybrid resin composite because it has the same coefficient of thermal expansion as enamel.
- D. microfilled resin composite because it shows the lowest possible water absorption.
- E. flowable resin composite.

Nr 36. Indicate the **false** sentence concerning air abrasion:

- A. it is effective in enamel, dentin or resin composite removal.
- B. it is used in micropreparation of pit and fissure caries on the occlusal surface prior to sealing.
- C. the effectiveness of cutting action is dependent on the particle size and the type of the abrasive material and air pressure applied.
- D. it can substitute acid-etching of enamel and dentin prior to use of bonding systems.
- E. it can mechanically scratch the surface of the dental mirror.

Nr 37. Indicate **false** statement about DMF:

- A. DMF is the total number of diseased, filled and missing teeth in permanent dentition.
- B. measures of primary teeth are reported as dmf.
- D. component D indicates active disease in progress.
- D. DMF=0 is typical of toothless patients.
- E. when DMF reports the number of surfaces affected then it is called DMFS.

Nr 38. Indicate the **false** statement concerning in-office bleaching of the non-vital teeth:

- A. rubber dam isolation is necessary.
- B. light-cured glass-ionomer needs to be placed over exposed gutta-percha of the root canal filling.
- C. 55% carbamide peroxide is placed in the pulp chamber for bleaching.
- D. after bleaching, calcium hydroxide paste is placed in the pulp chamber.
- E. cervical resorption is a possible complication.

Nr 39. Indicate the **false** statement concerning tetracycline staining:

- A. it's the type of systemic endogenous discoloration.
- B. different types of tetracyclines induce different types of discoloration, varying from yellow-orange to blue-gray.
- C. intensity of the staining depends on the antibiotic dose and the duration of treatment.
- D. staining from tetracycline type drugs occurs only if the antibiotics are used during odontogenesis.
- E. it is resistant to bleaching.

Nr 40. The group of endogenous discolorations does not include discolorations resulting from:

- A. excess of fluoride.
- B. caries.
- C. necrotic pulp left in the pulp chamber.
- D. mineralization of the pulp cavity as a result of trauma.
- E. chlorhexidine rinse.

Nr 41. Which agent is the most commonly used in home bleaching of the teeth with vital pulp?

- A. 10% sodium perborate.
- B. 10% carbamide peroxide.
- C. 35% sodium perborate.
- D. 35% carbamide peroxide.
- E. 35% hydrogen peroxide.

Nr 42. A periapical radiograph with K-file ISO 20 was taken in order to measure the canal working length of the tooth 22. The file length measured on the x-ray was 19.5 mm. The distance between the K-file tip and the radiological apex was 1.5 mm. What is the canal working length according to Ingle's method?

- A. 19.5 mm.
- B. 20 mm.
- C. 21 mm.
- D. 22 mm.
- E. 23 mm.

Nr 43. Which of the following clauses concerning ethylenediaminetetraacetic acid (EDTA) **is not** true?

- A. it has the ability to sequester di- and tricationic metal ions such as Ca^{2+} and Fe^{3+} .
- B. it dissolves organic part of the smear layer.
- C. it removes the mineralized portion of the smear layer.
- D. it is normally used in the concentration of 15% in endodontic procedures.
- E. it has similar properties to citric acid.

Nr 44. Dens invaginatus (dens in dente) is a rare malformation resulting from infolding of the epithelium associated with the coronal or root development. It most commonly affects:

- A. maxillary first molar.
- B. mandibular lateral incisor.
- C. maxillary lateral incisor.
- D. mandibular central incisor.
- E. mandibular first molar.

Nr 45. Two separate canals leave the pulp chamber and join just before the apex to form the single canal. They are described in Weine's classification as:

- A. type I.
- B. type II.
- C. type III.
- D. type IV.
- E. none of the above.

Nr 46. A red butterfly rash symmetrically distributed across the bridge of the nose is an important sign in the diagnosis of:

- A. pemphigoid.
- B. erythema multiforme.
- C. pemphigus.
- D. lupus erythematosus.
- E. lichen planus.

Nr 47. Panoramic radiography is basically worthless for:

- A. diagnosis of early caries lesions.
- B. diagnosis of maxillary trauma.
- C. detection of dental anomalies.
- D. traumatic cyst assessment.
- E. assessment of condylar fractures.

Nr 48. In morphology of primary teeth:

- A. on the palatal surface of maxillary lateral incisor there is a distinct cusp and a foramen cecum.
- B. the mandibular lateral incisor is similar to the central one, but smaller in all dimensions.
- C. the maxillary first molar usually has 2 roots.
- D. the mandibular second molar usually has 3 roots.
- E. the root of the maxillary canine length is at least twice the length of the crown.

Nr 49. A 17-year-old girl comes to the dental surgery. After an inferior dental block injection she can't close the eyelid. It is probably caused by:

- A. haematoma formation.
- B. allergy to the anesthetic agent.
- C. psychogenic complication.
- D. intravascular injection.
- E. paralysis of the facial nerve.

Nr 50. Fissure sealing:

- A. in milk dentition is commonly used owing to its cost-effectiveness.
- B. is of a small benefit in the situation where the level of fluoride in the environment is optimal.
- C. provides best results in children with high activity of caries.
- D. in older children shows better sealant retention rate than in younger ones.
- E. does not require absolute dryness and can be used in poorly erupted teeth.

Nr 51. A 5-year-old boy with a toothache comes to the dental surgery. The pain is spontaneous and has lasted for less than 2 days. In the clinical investigation there is a deep carious lesion in the tooth 75. The removal of soft dentine results in pulp exposure. You will perform:

- A. temporary filling.
- B. indirect pulp capping.
- C. direct pulp capping.
- D. pulp amputation.
- E. extraction.

Nr 52. The indications for the extraction of a pulpless milk tooth are:

- 1) haemophilia disease;
- 2) diabetes mellitus;
- 3) asthma;
- 4) congenital heart disease;
- 5) leukemia.

The correct answer is:

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

Nr 53. A 11-year-old boy comes to the dental surgery. Two days before, he had an accidental injury to the upper left central incisor. In the clinical investigation one can find the pulp exposure and the crown fracture involving enamel and dentine. The diameter of the exposure is about 2 mm, the wound is slightly bleeding and the pulp reaction is weak. Radiographic examination results are in accordance with the age norms. The treatment of choice will be:

- A. temporary filling and observation.
- B. indirect pulp capping and observation.
- C. direct pulp capping and cosmetic restoration.
- D. pulp amputation and cosmetic restoration.
- E. pulp extirpation and standard root canal treatment with material stimulating tissue development.

Nr 54. A 2-year-old girl comes to the dental surgery complaining of "pain in the mouth". She does not want to eat, has a headache and malaise. She has had raised temperature (up to 38° Celsius) for 2 days. The clinical investigation shows acute gingivitis, cervical lymphadenopathy and a few vesicles on her bottom lip. Probably she suffers from:

- A. difficulty in teething.
- B. candidiasis.
- C. aphthous oral ulceration.
- D. primary herpetic gingivostomatitis.
- E. herpangina.

Nr 55. „This genetically-based condition affects usually maxillary molars and is characterized by a tendency for the body of the tooth to enlarge at the expense of the roots. The pulp chamber is elongated and extends deeply into the root region, so the roots are shorten". The anomaly is called:

- A. taurodontism.
- B. hypodontia.
- C. fused tooth.
- D. Turner tooth.
- E. acromegaly.

Nr 56. In patients with diabetes mellitus, the characteristic oral symptoms are:

- 1) dry mouth;
- 2) periodontal problems;
- 3) gingival hyperplasia;
- 4) susceptibility to oral candidiasis;
- 5) enamel erosion.

The correct answer is:

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

Nr 57. "Peak incidence of the disease is at the age of 4. Initial symptoms are non-specific like: anorexia, irritability and lethargy. Later symptoms are: pallor, bleeding and fever. In initial haematological examination most patients have anaemia and thrombocytopenia. Bleeding may occur in the oral mucosa and infective lesions may appear in the mouth and throat." The symptoms are characteristic of:

- A. haemophilia.
- B. von Willebrand's disease.
- C. iron-deficiency anaemia.
- D. acute vitamin K deficiency.
- E. leukemia.

Nr 58. Avulsion injury of an immature permanent tooth requires a functional splinting for:

- A.** 7-10 days. **B.** 2-3 weeks. **C.** 3-4 weeks. **D.** 8-12 weeks. **E.** 4-6 months.

Nr 59. In the assessment of OHI-S index the following teeth should be examined:

- A.** 13, 11, 23, 31 – buccal surfaces and 33,13 – lingual surfaces.
B. 13, 11, 23 ,31 – lingual surfaces and 33,13 – buccal surfaces.
C. 16, 11, 26, 31 – buccal surfaces and 36, 46 – lingual surfaces.
D. 16, 11, 26, 31 – lingual surfaces and 36, 46 – buccal surfaces.
E. 16, 11, 26, 31, 36, 46 – buccal surfaces.

Nr 60. Find the **false** sentence concerning congenital porphyria:

- A.** it is an inherited disease.
B. in children urine is red-colored.
C. blood cells show fluorescence and have a short disintegration time.
D. subepidermal bullous lesions may develop when the skin is exposed to sunlight.
E. the primary teeth have characteristic blue-green discoloration.

Nr 61. In the process of primary teeth formation and eruption:

- A.** the upper, central incisor is usually the first milk tooth that appears in infant mouth.
B. the hard tissue formation of the first primary molar takes place in the perinatal period.
C. the crown of primary incisors is fully formed 3 years before the eruption of teeth.
D. the teeth reach occlusion before the root development is completed.
E. the process of teething starts earlier in girls than boys.

Nr 62. In the average sequence of the permanent tooth eruption:

- A.** the first lower molars start eruption earlier than the upper ones.
B. the upper and lower central incisors normally start to erupt at the same time.
C. the premolars start the eruption earlier in the mandible than in the maxilla.
D. the last tooth to appear in maxilla is canine.
E. the canines in the mandible start the eruption earlier than in the maxilla.

Nr 63. Find the **false** sentence concerning a child with Down's syndrome:

- A.** the eruption of the teeth is usually delayed and abnormal.
B. the length of the roots is shortened in relation to the crowns.
C. susceptibility to caries is high.
D. the prevalence and severity of periodontal disease is higher than in healthy children.
E. there is a tendency for dental crowding.

Nr 64. "The Epstein-Barr virus causes the condition. Kissing is the usual form of transmission. In children the condition usually presents as pharyngitis and tonsillitis. Oral ulceration and petechial haemorrhage at the hard/soft palate junction may occur. There is a unilateral lymph node enlargement and associated high fever". The symptoms are characteristic of:

- A.** herpangina. **B.** mononucleosis. **C.** rubella. **D.** herpes zoster. **E.** measles.

Nr 65. Fragile bones, impaired hearing, blue-coloured sclera, changes in dentine, deformation of the skull are characteristic of:

- A. ectodermal dysplasia.
- B. cleidocranial dysplasia.
- C. osteogenesis imperfecta.
- D. hypophosphatasia.
- E. congenital syphilis.

Nr 66. Premature exfoliation of the primary teeth is generally associated with:

- 1) hypophosphatasia;
- 2) prepubertal periodontitis;
- 3) Down's syndrome;
- 4) ectodermal dysplasia;
- 5) cherubism.

The correct answer is:

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

Nr 67. A 6-year-old boy comes to the dental surgery. Two days before, under local anesthesia, he had his left lower first molar extracted. On the lower lip there is huge, painless ulceration. This condition is probably caused by:

- A. cancer.
- B. haematoma formation.
- C. allergy.
- D. lip biting.
- E. aphtae.

Nr 68. The characteristic symptoms of concussion is/are:

- 1) oedema of the periodontal ligament;
- 2) haemorrhage;
- 3) sensitivity of the tooth to percussion;
- 4) increased mobility of the tooth;
- 5) displacement of the tooth.

The correct answer is:

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

Nr 69. A 5-year-old child comes to the dental surgery with a trauma of the tooth 51 (of class V according to Ellis classification). The trauma occurred 2 hours earlier. The tooth has been kept in milk. The occlusion is normal, the dental development is within the age norm. The proper management is:

- A. endodontic treatment of the tooth and its subsequent replantation, splinting for 7-14 days.
- B. the tooth replantation, splinting for 7-14 days, endodontic treatment after 2 weeks.
- C. the tooth replantation, splinting for 7-14 days, testing the vitality of pulp.
- D. the tooth replantation, splinting for 3-4 weeks, pulp extirpation after 4 weeks.
- E. observation.

Nr 70. The most reliable method of testing the vitality of pulp in an injured tooth is:

- A. assessing the mobility of the tooth.
- B. observing a change of color of the tooth.
- C. pulp reaction to electric stimuli.
- D. pulp reaction to thermal stimuli.
- E. assessment of blood flow in the pulp.

Nr 71. Fiber optic transillumination (FOTI) can be used in diagnosis of:

- | | |
|-----------------------------|-----------------------|
| 1) proximal surface caries; | 4) pulpal blood flow; |
| 2) enamel infractions; | 5) pulpal vitality. |
| 3) ankylosis; | |

The correct answer is:

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

Nr 72. The condition described as “pink spot” in injured tooth is caused by:

- | | |
|--------------------------------|--------------------------|
| A. internal resorption. | D. pulp exposure. |
| B. pulpal necrosis. | E. ankylosis. |
| C. pulpal hyperemia. | |

Nr 73. A 6-year-old girl comes to dental surgery. Her upper and lower lip are coated with furry, white patches. In a clinical investigation they can be easily removed to produce a bleeding underlying surface. She probably suffers from:

- | | |
|--|------------------------|
| A. candidiasis. | D. leucoplakia. |
| B. acute bacterial infection. | E. allergy. |
| C. recurrent aphthous ulceration. | |

Nr 74. Find the **false** statement concerning ankylosis (infraocclusion):

- A.** the prevalence is lower in the primary than permanent dentition.
- B.** second molars are the most frequently affected primary teeth.
- C.** it occurs more frequently in mandibular teeth than in maxillary teeth.
- D.** there is no causal relationship between ankylosed primary teeth and an absence of permanent successors.
- E.** it is the result of disturbances in intermittent resorption and reparation during exfoliation.

Nr 75. Find the **false** sentence concerning rampant caries:

- A.** it is a suddenly appearing, widespread, rapidly burrowing form of caries.
- B.** it may occur in the teeth that have been caries free so far.
- C.** young teenagers seem to be particularly susceptible to this kind of caries.
- D.** it is not observed in adults.
- E.** saliva secretion reduction may be one of causative factors.

Nr 76. The base of choice material used for filling canals in a standard endodontic treatment of milk teeth is/are:

- | | |
|---|-------------------------------------|
| A. gutta-percha points with sealant. | D. zinc oxide-eugenol paste. |
| B. silver points with sealant. | E. MTA. |
| C. polyantibiotics paste. | |

Nr 77. Find a **false** statement concerning glass-ionomer cement:

- A.** it can be used as a luting agent.
- B.** it has the potential to bond to calcium of mineralized dental tissue.
- C.** it shows resistance to secondary caries.
- D.** when comparing with compomers, its esthetic result is better.
- E.** it is less sensitive to moisture than composite materials.

Nr 78. In vitamin D-resistant rickets the following is observed:

- A. early teeth eruption.
- B. impacted teeth.
- C. pulp chamber is small.
- D. there is no enamel on the dentine.
- E. the dentine is normal.

Nr 79. Natal teeth are often present in:

- A. Down's syndrome.
- B. Turner syndrome.
- C. cleidocranial dysplasia.
- D. hereditary gingival fibromatosis.
- E. Ellis-van Creveld syndrome.

Nr 80. The condition that represents the union of two independently developing primary or permanent teeth is called:

- A. gemination.
- B. fusion.
- C. dens in dente.
- D. odontoma.
- E. microdontia.

Nr 81. Early childhood caries:

- 1) is associated with prolonged on-demand bottle nursing;
- 2) is a superficial caries in children;
- 3) is easy to treat;
- 4) its prevalence is higher among boys than girls;
- 5) is connected with bacterial transmission.

The correct answer is:

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

Nr 82. The following are applied in trigeminal neuralgia treatment:

- 1) opioids;
- 2) steroids;
- 3) phenytoin;
- 4) carbamazepine;
- 5) antiviral drugs.

The correct answer is:

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

Nr 83. Cold abscesses may be symptoms of:

- 1) tuberculosis ulcerosa;
- 2) tuberculosis of bones;
- 3) lymphatic tuberculosis;
- 4) colliquative tuberculosis.

The correct answer is:

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

Nr 84. Which of the naevus is prone to melanoma?

- 1) naevus mixtus;
- 2) Spitz naevus;
- 3) junctional naevus;
- 4) strawberry naevus;
- 5) intraepidermal naevus.

The correct answer is:

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

Nr 85. Pre-cancerous condition of the oral mucosa is:

- | | |
|----------------------|-------------------|
| 1) leukoplakia; | 4) erythroplakia; |
| 2) keratosis senile; | 5) papilloma. |
| 3) Bowen's disease; | |

The correct answer is:

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

Nr 86. Which of cardiac defects and diseases give high risk of bacterial endocarditis and require pre-operative use of antibiotics prior to bacteremia-causing procedures according to AHA (American Heart Association 1997)?

- 1) Fallot's tetralogy;
- 2) acquired valves dysfunction caused by rheumatic disease;
- 3) hypertrophic cardiomyopathy;
- 4) artificial heart valves;
- 5) untreated patent ductus arteriosus.

The correct answer is:

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

Nr 87. The complications of acute osteitis may include:

- | | |
|---|--------------------------|
| 1) pathologic fractures; | 4) phlegmon; |
| 2) temporo-mandibular joint ankylosis; | 5) metastatic abscesses. |
| 3) thrombophlebitis of the veins of the face; | |

The correct answer is:

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

Nr 88. Suturing of a post-extraction wound **is not** indicated in:

- | | |
|----------------------|------------------|
| 1) hemophilia A; | 4) diabetes; |
| 2) hemophilia B; | 5) hypertension. |
| 3) thrombocytopenia; | |

The correct answer is:

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

Nr 89. The site **most commonly** affected by tuberculosis luposa in the mouth is:

- 1) lip; 2) tongue; 3) palate; 4) cheek; 5) gingiva.

The correct answer is:

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

Nr 90. From the following list of diseases point out these which one of the symptoms may be ulceration of the oral mucous membrane:

- | | |
|---------------------|-------------------|
| 1) agranulocytosis; | 4) syphilis; |
| 2) leukemia; | 5) heart failure. |
| 3) tuberculosis; | |

The correct answer is:

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

Nr 91. Point out the true sentences characterising a fracture of coronoid process of the mandible:

- 1) it is a closed fracture;
- 2) it is an avulsion fracture during a strong contraction of the temporal muscle;
- 3) this kind of fracture may be accompanied by trismus;
- 4) it is often connected with a fracture of the zygomatic bone;
- 5) this type of fracture is accompanied by a heavy pain in the temporomandibular joint.

The correct answer is:

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

Nr 92. Point out the true sentences characterizing temporomandibular joint ankylosis:

- 1) it is bilateral, created in developmental age, causes mandibular hypoplasia, and the formation of so-called bird face deformity;
- 2) false ankylosis can be the first symptom of tetanus;
- 3) true ankylosis can only be treated surgically;
- 4) a feature of false ankylosis is extracapsular symphysis;
- 5) acquired ankylosis can be a result of measles, scarlet fever or mumps.

The correct answer is:

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

Nr 93. A 66-year-old female patient had the following symptoms:

- bilateral painless swelling of the lymphatic glands in the neck and of supraclavicular lymph nodes.
- weakness
- night sweats
- fever
- high erythrocyte sedimentation rate
- leucocytosis

Specific Reed-Sternberg cells were found in the lymph node taken for examination.

The above mentioned data allows to make the following diagnosis:

- A.** lymphoblastic leukemia. **D.** Hodgkin's lymphoma.
B. lymphocytic leukemia. **E.** multiple myeloma.
C. malignant lymphoma.

Nr 94. The posterior wall of the maxillary sinus is pierced by the alveolar canals which transmit:

- A.** the anterior superior alveolar nerves.
- B.** the posterior superior alveolar nerves.
- C.** the infraorbital nerve.
- D.** the greater posterior alveolar nerve.
- E.** the lateral superior alveolar nerves.

Nr 95. The Partsch II procedure involves:

- A. marsupialization.
- B. multistage procedure, with an acrylic bung.
- C. multistage procedure, without an acrylic bung.
- D. a one-stage procedure to remove the entire cyst.
- E. exploratory opening of the cyst cavity.

Nr 96. This lesion is defined as “any white patch or plaque that cannot be characterized clinically or pathologically as any other disease”. The above described lesion is:

- A. oral submucous fibrosis.
- B. Plummer-Vinson syndrome.
- C. leukoplakia.
- D. oral lichen planus.
- E. none of the above.

Nr 97. A 22-year-old patient has reported with pain and acute inflammation of the soft tissue surrounding the crown of a partially erupted lower third molar. The best treatment would be:

- A. to extract the lower third molar.
- B. to apply antibiotics.
- C. to excise the surrounding tissue in order to settle the infection.
- D. to apply local antiseptic irrigation without antibiotics.
- E. to remove the lower third molar after settling the infection.

Nr 98. From the maxillary canine and premolar, the infection typically spreads to the following space:

- A. palatal.
- B. submaxillar.
- C. buccal.
- D. retropharyngeal.
- E. submandibular.

Nr 99. The most appropriate treatment of ameloblastoma is to:

- A. excise the tumor with a margin of the surrounding bone.
- B. excise the tumor with extensive curettage.
- C. careful enucleation.
- D. no surgical treatment is necessary.
- E. only regular reviews are required.

Nr 100. Pick the **most appropriate** sentence describing the cherubism:

- A. it is inherited in an autosomal dominant fashion.
- B. the treatment is conservative as the lesions usually resolve.
- C. it is treated by local excision.
- D. it is treated by radiotherapy.
- E. correct answers are A + B.

**Now, take the other answer ticket in order to mark the answers
to questions 101 - 200.**

Nr 101. The TNM system is applied in staging oral cancer. Choose the **false** tumor stage from the following:

- A. T1N0M0.
- B. T2N1M0.
- C. T0N1M1.
- D. T1N1M1.
- E. T3N3M1.

Nr 102. Which of the following symptoms will not appear in local anaesthetic drug intoxication?

- A. coma.
- B. labial and lingual numbness.
- C. generalized convulsions.
- D. an increase in blood pressure.
- E. cardiac arrhythmias.

Nr 103. What are the characteristic features of the upper orbital fissure syndrome?

- 1) ptosis;
- 2) absence of corneal reflex;
- 3) pupil dilation;
- 4) abnormal sensation in the area enervated by suborbital nerve;
- 5) lowering of the eyelid inner angle.

The correct answer is:

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

Nr 104. Only semi-rotational extraction movements are applied to remove upper central incisors and:

- A. lower canines.
- B. lower incisors.
- C. upper canines.
- D. lower premolars.
- E. upper lateral incisors.

Nr 105. Which of the following concerning trigeminal neuralgia is true:

- 1) it is more common in elderly males;
- 2) it is characterized by fits of pain usually affecting both sides of the face, in the areas supplied by the II and III branch of the trigeminal nerve;
- 3) its fits of pain may be triggered by pressing the triggering points;
- 4) its therapy is started by applying big doses of NSAIDs;
- 5) in its surgical treatment – trigeminal nerve decompression is carried out by damaging nerve V ganglion with an injection of glycerol.

The correct answer is:

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

Nr 106. A 70-year-old patient presented with pain and mandibular distortion. He had undergone radiotherapy 10 years ago for his tongue carcinoma. The skin above the lesion is cool with markedly visible superficial veins. The blood test shows an increase in alkaline phosphatase concentration. The X-ray picture reveals the areas of calcification and ossification on the lesion periphery as well as periosteal reaction seen as cross striation. This clinical picture may represent:

- A. multiple myeloma.
- B. chondrosarcoma.
- C. fibrosarcoma.
- D. primary reticulosarcoma.
- E. osteosarcoma.

Nr 107. A dentist received from the laboratory the result of biopsy of the patient suspected of bullous disease. The result is: “*IgA class antibodies against the basal layer of epithelium*”. Patient suffers from:

- A. epidermolysis bullosa.
- B. LABD.
- C. pemphigus.
- D. Darier’s disease.
- E. Stevens-Johnson syndrome.

Nr 108. A 20-year-old patient reported to the dentist, complaining of spontaneous gingival bleeding. Medical history did not reveal systemic diseases or medication. No earlier problems with periodontium, bleeding had showed 2 weeks ago (no earlier appointment available). The examination revealed spontaneous gingival bleeding, inflammation of the gingival margin, slight swelling of the interdental papillae, calculus deposits along gingival margin of the teeth 33-43, oral hygiene satisfactory. The **most proper** modus operandi is:

- A. urgent blood testing (morphology and cell pattern).
- B. scaling.
- C. scaling with antibiotics.
- D. oral hygiene instructions.
- E. Chlorhexidine irrigation of dental pockets.

Nr 109. Acute periodontal states **do not** include:

- A. periodontal abscess.
- B. gingival abscess.
- C. pericoronitis.
- D. pericoronal abscess.
- E. ANUG.

Nr 110. Which of the following is/are responsible for resorption of the alveolar bone?

- A. IL-1.
- B. PG2.
- C. IL-10.
- D. metalloproteinases.
- E. answers A and B are correct.

Nr 111. LPS is:

- A. lipopolysaccharide secreted by Gram-positive bacteria.
- B. lipopolysaccharide secreted by Gram-positive and Gram-negative bacteria.
- C. exotoxin secreted by Gram-positive bacteria.
- D. exotoxin secreted by Gram-negative bacteria.
- E. endotoxin situated in the cell wall of Gram-negative bacteria.

Nr 112. Gingivitis associated with blood dyscrasias is one of the:

- A. gingivitis associated with dental plaque only.
- B. non-plaque-induced gingival lesions.
- C. periodontitis as a manifestation of systemic diseases.
- D. gingival diseases associated with dental plaque, modified by systemic factors.
- E. gingival diseases not associated with dental plaque, modified by systemic diseases.

Nr 113. Primary features of aggressive periodontitis **do not** include:

- A. rapid loss of connective tissue attachment.
- B. occurrence in patients without systemic diseases.
- C. phagocytosis malfunction.
- D. familial occurrence.
- E. dental deposit amount relatively low comparing with the progress of periodontal tissue destruction.

Nr 114. The red complex of bacteria, according to Socransky, contains:

- A. *P. gingivalis*, *C. rectus*, *T. denticola*.
- B. *P. gingivalis*, *E. corrodens*, *T. denticola*.
- C. *P. gingivalis*, *A. actinomycetemcomitans*, *T. denticola*.
- D. *P. gingivalis*, *T. forsythia*, *T. denticola*.
- E. *P. gingivalis*, *T. forsythia*, *F. nucleatum*.

Nr 115. Diseases and conditions, which in specific situations **do not** require treatment, are:

- 1) leukoedema;
- 2) homogenous leukoplakia;
- 3) geographic tongue;
- 4) fissured tongue.

The correct answer is:

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

Nr 116. The primary lesion for zoster and chickenpox is:

- A. ulceration.
- B. macula.
- C. vesicle.
- D. blister.
- E. wheal.

Nr 117. *Dermatitis herpetiformis* is a latin name for:

- A. Darier-White disease.
- B. Pemphigus foliaceus.
- C. Duhring's disease.
- D. Lyell syndrome.
- E. Melkersson-Rosenthal syndrome.

Nr 118. Pemphigus differs from pemphigoid in:

- A. class of antibodies.
- B. blisters on the oral mucosa.
- C. possible appearance of dermal lesions.
- D. possible coexistence of desquamative gingivitis.
- E. none of above.

Nr 119. Which of the following **is not** one of collagenoses?

- A. scleroderma.
- B. erythema multiforme.
- C. Sjögren's syndrome.
- D. lupus erythematosus.
- E. all mentioned diseases belong to collagenoses.

Nr 120. The treatment plan for aggressive periodontitis should include:

- A. nonsurgical and surgical treatment.
- B. nonsurgical treatment.
- C. surgical treatment and antibiotic therapy.
- D. nonsurgical treatment and antibiotic therapy.
- E. nonsurgical treatment, surgical treatment and antibiotic therapy.

Nr 121. A mesial step of the terminal plane is a normal one in a child:

- A. one year old.
- B. three years old.
- C. five years old.
- D. twelve years old.
- E. fourteen years old.

Nr 122. Skeletal class III can be stated when:

- A. SNA angle is 78° and SNB angle is 83° .
- B. SNB angle is 83° and SNPg angle is 85° .
- C. ANB angle is 7° .
- D. ML-NSL angle is 35° .
- E. NSBa angle is 120° .

Nr 123. In Angle class II, group I, subgroup, the following malocclusion should be diagnosed:

- A. pseudo distocclusion.
- B. total distocclusion with retrusion of lower incisors.
- C. retrognathic mandible with retrusion of upper incisors.
- D. mesiocclusion with backward mandibular rotation.
- E. unilateral distocclusion with protrusion of upper incisors.

Nr 124. Klammt's open activator and Andresen's activator differ in:

- 1) shape of the leading planes;
- 2) extent of the appliance plate;
- 3) position of the expansion screw;
- 4) shape of the labial arches;
- 5) connection between the upper and lower plate of the appliance.

The correct answer is:

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

Nr 125. A lateral cephalogram demonstrates: short mandibular body, decreased chin prominence, increased mandibular angle. The diagnosis should be:

- A. retrognathic mandible.
- B. total distocclusion.
- C. total open bite.
- D. partial deep bite.
- E. pseudo distocclusion.

Nr 126. The relationship of upper and lower incisors in individual occlusions is described by:

- 1) symmetry line of alveolar arches;
- 2) Bolton's index;
- 3) overjet;
- 4) overbite;
- 5) Little's index.

The correct answer is:

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

Nr 127. Ricketts' aesthetic line can be traced on:

- 1) a frontal photo of the face;
- 2) a profile photo of the face;
- 3) a lateral cephalogram;
- 4) a posteroanterior cephalogram;
- 5) a plaster model.

The correct answer is:

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

Nr 128. A palatal plate with an anterior flat plane is used in treatment of:

- A. anterior open bite.
- B. total open bite.
- C. distocclusion with a protrusion of the upper incisors.
- D. deep bite.
- E. total mesiocclusion.

Nr 129. A patient is instructed to take a standard posture, to tilt his head back and to protrude his mandible in order to touch the upper lip with lower incisors. This exercise is recommended in the following types of malocclusions:

- A. open bite.
- B. deep bite.
- C. retrognathic mandible with protrusion of upper incisors.
- D. posterior crossbite.
- E. partial mesiocclusion

Nr 130. The following muscle is derivative of the second pharyngeal arch:

- A. orbicularis oris muscle.
- B. masseter muscle.
- C. lateral pterygoid muscle.
- D. temporal muscle.
- E. mylohyoid muscle.

Nr 131. During normal development, the maxilla translates in the following directions:

- 1) upwards;
- 2) downwards;
- 3) backwards;
- 4) forwards;
- 5) does not change its position.

The correct answer is:

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

Nr 132. The shape of the condylar process, the mandibular angle, the shape of the lower edge of the mandibular body allow to assess the following:

- A. degree of open bite.
- B. maturity of the mandible.
- C. tendency for the mandibular rotation.
- D. growth potential of the mandible.
- E. degree of mandibular retrognathism.

Nr 133. In a 5-year-old child with functional mandibular retrognathism and a protrusion of the upper incisors, the following should be used:

- A. Kraus partial vestibular screen.
- B. Hotz vestibular screen.
- C. palatal plate with anterior inclined plane.
- D. inclined plane.
- E. facial mask.

Nr 134. According to Demirjian G stage of the canine maturity, in which the crown and the root are mineralised and the walls of the root canal are parallel with partially open apical foramen, co-exists with the following:

- 1) eruption of the permanent incisors and first molars;
- 2) eruption of the canine;
- 3) pre-puberty deceleration of growth;
- 4) peak growth stage of maturation;
- 5) end of the puberty growth spurt.

The correct answer is:

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

Nr 135. Concavity in the lower edge of the body of the second and third cervical vertebrae (C2 and C3) and trapezoidal shape of the body of the third and fourth cervical vertebrae (C3 and C4) show that the peak growth of the mandible:

- A. occurred about 3 years prior to the above described stage.
- B. occurred about 1 year prior to the above described stage.
- C. occurs during the above described stage of maturity of the cervical vertebrae.
- D. will happen within next year after the above described stage.
- E. will happen within next 3 years after the above described stage.

Nr 136. According to the Polish standards of orthodontic classification, the common features of total mesiocclusion and functional mandibular prognathism are:

- 1) canine class I;
- 2) Angle Class III;
- 3) negative overjet;
- 4) positive function test, retraction of the mandible;
- 5) protrusion of the chin prominence.

The correct answer is:

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

Nr 137. The features of a patient with partial distocclusion are:

- 1) protrusion of the upper lip;
- 2) retraction of the lower lip;
- 3) shortening of the philtrum;
- 4) deepening of the lip-chin groove;
- 5) retraction of the chin prominence.

The correct answer is:

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

Nr 138. A child with hypoplasia of the mandible, and temporomandibular joint as well as malformations of the external ears should be diagnosed as:

- A. acromegaly.
- B. Goldenhar syndrome.
- C. Crouzon syndrome.
- D. ectodermal dysplasia.
- E. achondroplasia.

Nr 139. Leveling, guiding, contraction and alignment are:

- A. phases of malocclusion treatment with an archwire appliance.
- B. stages of osteogenesis distraction of the mandible.
- C. stages of speech reeducation.
- D. phases of obtaining a construction bite.
- E. phases of treatment of malocclusion with Fränkl appliance.

Nr 140. The acrylic palatal plate, centrally positioned Fischer's expansion screw, labial arch and the arrowhead clasps are elements of the appliance named after:

- A. Bimler.
- B. Schwarz.
- C. Wunderer.
- D. Derichsweiler.
- E. Nance.

Nr 141. Indicate which of the following statements concerning galvanofarming is false:

- A. homogenous gold with a purity of 99.99% precipitates in the process of galvanization.
- B. substructure formed of the gold precipitated from the electrolyte solution in galvanic technique is characterized by quadrupled hardness in comparison to the form obtained in the casting technique.
- C. galvanofarming enables to achieve good aesthetic effects owing to the thin layer of the metal Framework of approximately 0.2 mm.
- D. the process of joining metal and ceramics takes place thanks to the participation of metal oxides.
- E. permanent restorations by this method are characterized by higher marginal tightness than those obtained by casting.

Nr 142. Which of the following solutions for chemical plaque control is/are recommended for patients before implantation:

- A. 0.1% chlorhexidine solution.
- B. 1% chlorhexidine solution.
- C. Cetylpyridine chloride.
- D. Sanguinarine chloride.
- E. correct answers are A,C,D.

Nr 143. Prosthetic stomatitis should be differentiated with:

- 1) mechanical trauma;
- 2) mycosis;
- 3) systemic diseases;
- 4) toxic influence of metals;
- 5) amalgam tattoo;
- 6) lichen planus;
- 7) pemphigus;
- 8) erythema multiforme;
- 9) stomatodynia;
- 10) lupus erythematosus systemicus.

The correct answer is:

- A. 1,2,3,5,6,7,8,9,10.
- B. 1,2,3,4,5,6,7,8,9.
- C. 1,2,3,4,6,7,8,9.
- D. 1,2,3,5,6,9,10.
- E. all answers are correct.

Nr 144. The main causes of prosthetic stomatitis are:

- 1) mechanical trauma;
- 2) yeast-like fungal infection;
- 3) bacterial infection;
- 4) influence of denture plaque;
- 5) influence of dental plaque;
- 6) chemical factors.

The correct answer is:

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

Nr 145. Plan control visits for a patient treated with overdentures. The patient will receive the denture on June 1st.

Control visits	First	Second	Third
A.	June 2 nd	June 9 th	June 23 rd
B.	June 3 rd	June 10 th	June 28 th
C.	June 2 nd	June 9 th	June 28 th
D.	June 8 th	June 15 th	June 23 rd
E.	June 8 th	June 15 th	June 29 th

Nr 146. The construction bite can be corrected according to CT. It can be assumed that while increasing the occlusal vertical dimension the TMJ (temporomandibular joint) space **cannot be** enlarged:

- A. more than 1 mm in comparison to the initial position.
- B. more than twice in comparison to the initial position.
- C. more than 2 mm in comparison to the initial position.
- D. in the case of pain occurring during wide mouth opening.
- E. none of the answers is correct.

Nr 147. The Michigan splint:

- 1) is a thin stabilizing appliance;
- 2) is a thick stabilizing appliance;
- 3) posses a flat surface;
- 4) posses a surface resembling the occlusal surface of the opposite teeth;
- 5) requires creating freedom in the centre of 0.5-1.0 mm;
- 6) requires canine guidance in protrusion and laterotrusion;
- 7) requires incisor guidance in protrusion and canine guidance in laterotrusion.

The correct answer is:

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

Nr 148. A patient was diagnosed with generalized pathological tooth wear without signs of TMJ dysfunction. The occlusion reconstruction includes:

- 1) an increase in the occlusal vertical dimension up to 2 mm;
- 2) an increase in the occlusal vertical dimension amounting to the interocclusal distance plus 2 mm;
- 3) establishing the proper occlusion;
- 4) single-stage treatment;
- 5) establishing a construction bite relying on X-rays;
- 6) replacement of the missing teeth without an increase in the occlusal vertical dimension.

The correct answer is:

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

Nr 149. A click during palpatory examination of the temporomandibular region may be a symptom of:

- 1) temporomandibular disorders with anterior displacement of the disc without reduction;
- 2) temporomandibular disorders with anterior displacement of the disc with reduction;
- 3) displacement of the disc from the mandibular head during first phase of the abduction of the mandible;
- 4) disc recapturing the mandibular head during first phase of the abduction of the mandible;
- 5) displacement of the disc from the mandibular head during terminal phase of the adduction of the mandible;
- 6) disc recapturing the mandibular head during the terminal phase of the adduction of the mandible.

The correct answer is:

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

Nr 150. What parameters found during an examination of the free movements of the mandible does not comply with the physiological norm of the stomatognathic system?

- 1) maximal abduction of the mandible of 64 mm;
- 2) lateral deviation of the mandible during mouth opening of 1.5 mm;
- 3) lateral movement of the mandible on the mediotrusion side of 7 mm;
- 4) protrusive movement of the mandible of 9-11 mm;
- 5) protrusive movement of the mandible of 7 mm.

The correct answer is:

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

Nr 151. The most appropriate materials for prosthetic crowns in patients with periodontal diseases, are:

- 1) all available dental alloys;
- 2) high noble metal concentration alloys;
- 3) methacrylate resins;
- 4) composites;
- 5) ceramics.

The correct answer is:

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

Nr 152. The flexible part of a circumferential clasp should be positioned on:

- A.** active guiding surface. **D.** retentive surface.
B. passive guiding surface. **E.** stabilizing surface.
C. classical guiding surface.

Nr 153. A movable alveolar ridge in the anterior region of the maxilla is frequently a result of a long-lasting use of the upper removable denture with no prosthetic appliances in the mandible in the presence of the following Eichner classes of dentition loss:

- A.** A3 and A4. **B.** B1 and B2. **C.** B3 and B4. **D.** C1 and C2. **E.** C3 and C4.

Nr 154. Which of the following statements referring to the dimension of the interocclusal rest space is true?

- A.** interocclusal rest space increases with the protrusion of the patient's head, and increases with posterior inclination of the patient's head.
B. interocclusal rest space decreases with the protrusion of the patient's head, and increases with posterior inclination of the patient's head.
C. interocclusal rest space does not decrease with the protrusion of the patient's head, and increases with posterior inclination of the patient's head.
D. interocclusal rest space decreases with the protrusion of the patient's head, and does not increase with posterior inclination of the patient's head.
E. interocclusal rest space decreases with the protrusion of the patient's head, and decreases with posterior inclination of the patient's head.

Nr 155. Which factors may disturb the proper establishing of the vertical occlusal dimension while using the method of a central bearing post?

- 1) position of the bearing post;
- 2) clamping force generated during the registration;
- 3) resiliency of mucous tissues;
- 4) posterior inclination of the patient's head;
- 5) skeletal morphology of the maxilla and mandible;
- 6) upright position of the patient's head.

The correct answer is:

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

Nr 156. Which factors may affect the clinical establishing of the mandibular rest position?

- 1) patient's psycho-emotional condition;
- 2) pain in the temporomandibular joint region;
- 3) medications such as muscle relaxants;
- 4) forward posture of the cranium relative to the cervical region of the spinal column;
- 5) tooth abrasion.

The correct answer is:

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

Nr 157. Which sentence is characteristic of the lingual bar of the framework denture?

- 1) it should always be in contact with the alveolar mucosa;
- 2) its width shouldn't be less than 4 mm;
- 3) its superior border should be located 1 mm below the gingival margin;
- 4) it should be located 7-8 mm above the floor of the mouth.

The correct answer is:

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

Nr 158. The Campagne impression technique is used to fabricate immediate dentures. Which is characteristic of this method?

- 1) acrylic resin custom tray;
- 2) stock tray;
- 3) closed mouth functional impression;
- 4) alginate material;
- 5) zinc oxide-eugenol material.

The correct answer is:

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

Nr 159. Bennett's movement can be observed during:

- A.** mouth opening. **D.** mediotrusion.
B. protrusion. **E.** laterotrusion.
C. retrusion.

Nr 160. A patient was referred for prosthodontic rehabilitation after surgical treatment of a tumor. As a result of partial resection of the maxilla, there was a tissue lesion on the right side with residual dentition on the left side of the upper alveolar ridge. Lower wall of the orbit wasn't injured. On the basis of the above description and in accordance with Dreher classification the lesion is called:

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

Nr 161. A 13-year-old patient presented with the missing tooth number 12, an injury caused by trauma. The adjacent teeth don't reveal any signs of mobility or caries. Which prosthodontic option is recommended in this case?

- 1) implant in position 12 prior to zirconium crown;
- 2) PFM bridge on the teeth 11 and 13;
- 3) adhesive bridge on the teeth 11 and 13;
- 4) removable partial denture restoring the tooth 12.

The correct answer is:

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

Nr 162. On opening and closing the mouth, a reciprocal clicking sound was detected in the left temporomandibular joint. The interincisal opening was 40 mm and the mandible did not show laterodeviation. It signifies:

- A.** disk displacement with reduction in the left temporomandibular joint.
B. disk displacement without reduction in the left temporomandibular joint.
C. degeneration lesions of the left temporomandibular joint.
D. disorders of the masseter and temporal muscles on the left side.
E. subluxation of the joint disk.

Nr 163. The replacement of the missing tooth 23 in a patient with normal occlusion and the presence of the other teeth in the oral cavity **cannot** be performed by constructing:

- A.** the bridge supported by metal ceramic crowns on the abutments 22 and 24.
B. the bridge supported by metal ceramic crowns on the abutments 24 and 25.
C. the bridge supported by a metal ceramic crown on the abutment 24.
D. the Maryland bridge supported by the teeth 22 and 24.
E. the crown on an implant 23.

Nr 164. Which is the correct definition of the rest position of the mandible?

- 1) spontaneously assumed position of the mandible in the upright position of the body;
- 2) position depending on the presence of the teeth, the degree of their destruction and drifting;
- 3) position maintained due to the physiological balance of adductor and abductor muscles and muscles protruding and retruding the mandible;
- 4) position in which the condyles in the temporomandibular joints are placed symmetrically with a slight downward and backward displacement.

The correct answer is:

- A.** 2,4. **B.** 1,2. **C.** 1,3. **D.** 4,5. **E.** all the answers are correct.

Nr 165. Which of the following **is not** the synonym of the centric occlusion?

- 1) rest position;
- 2) centric relation;
- 3) maximum intercuspation;
- 4) muscle-determined position;
- 5) habitual position.

The correct answer is:

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

Nr 171. Which of the following **is not** the treatment of carbon monoxide intoxication?

- A. hyperbaric oxygen therapy.
- B. pure oxygen administration.
- C. early endotracheal intubation.
- D. red blood cell transfusion.
- E. the treatment of brain odema.

Nr 172. Which of the following should be administered in the case of severe pain in the chest:

- A. morphine, atropine, nitroglycerine.
- B. nitroglycerine, aspirin, oxygen.
- C. fluid therapy, aspirin, oxygen.
- D. morphine, oxygen, nitroglycerine.
- E. atropine, oxygen, fluid therapy.

Nr 173. One of the features of a mass casualty incident is:

- A. large number of victims.
- B. need for medical segregation.
- C. first aid started by the witnesses of the incident.
- D. disproportion between abilities and needs for treatment requirements.
- E. first rescue actions started by firemen.

Nr 174. What does abbreviation SIRS mean?

- A. multiple injuries.
- B. acute respiratory and circulatory failure.
- C. acute non-inflammatory renal failure.
- D. severe bacteria infection.
- E. generalized inflammatory response.

Nr 175. If, after being bitten by an insect, a patient has low blood pressure then the first drug of choice is:

- A. difenhydramine.
- B. metyloprednisolon.
- C. adrenaline.
- D. glucagon.
- E. ventolin.

Nr 176. A dentist drew attention to the elegance of his 80-year-old patient and her interesting makeup. In order not to violate the Hippocratic oath, he may tell her about it:

- A. only if he is homosexual.
- B. only after the treatment.
- C. a patient during treatment must remain "free of gender".
- D. when he considers that this will make her feel pleased.
- E. both B and C are true.

Nr 177. According to the Constitution of the Republic of Poland the citizens are entitled to equal access to:

- A. health care.
- B. experimental treatment.
- C. publicly financed health care procedures.
- D. physical culture.
- E. free medical treatment.

Nr 178. Who is allowed to supervise a medical experiment involving humans?

- A. a pharmacist.
- B. a lawyer.
- C. a psychologist.
- D. a doctor or a dentist.
- E. an administrator.

Nr 179. Does the Act on professions of physician and dentist divide medical experiments into research and therapeutic ones?

- A. it considers any medical experiment as a treatment.
- B. it considers any medical experiment as research.
- C. yes.
- D. no.
- E. it does not say anything about medical experiments.

Nr 180. Who decides to which regional chamber a dentist practicing on a territory of two or more chambers belongs?:

- A. the dentist himself.
- B. a lawyer.
- C. a medical court.
- D. administration.
- E. the president of a regional medical council.

Nr 181. A dentist employed in a health care institution was visited by a patient with dental caries who did not require any urgent care. The dentist had been falsely accused by this patient of committing malpractice when treating him earlier. The dentist does not want to treat the patient:

- 1) he is allowed to make such a decision after obtaining his superior's consent;
- 2) he must treat the patient because of the patient's bad health state;
- 3) when refusing the patient treatment he must indicate the real possibility of obtaining treatment from another dentist;
- 4) before deciding to refuse treatment he must consult with another dentist;
- 5) the dentist should communicate his decision to the Patient's Ombudsman.

The correct answer is:

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

Nr 182. Under the "Uprawnienia" (Permissions) rubric on a prescription form "IB" stands for:

- A. patients entitled to free provision of drugs related to diseases caused by work with asbestos.
- B. soldiers performing active military service in case of mobilization.
- C. pregnant and breastfeeding women.
- D. war invalids and persecuted persons.
- E. patients holding the title of the Honored Blood Donor.

Nr 183. The individual dental practice, specialist dental practice and group dental practice are supervised by:

- A. Voivod (regional) Department of the National Health Fund (NFZ).
- B. relevant regional medical council.
- C. relevant voivod (regional governor).
- D. Minister of Health.
- E. National Sanitary Inspectorate (PIS).

Nr 184. A release of original medical records is allowed when the following conditions are fulfilled:

- 1) it is requested by the patient;
- 2) recipient of the original confirms it in writing;
- 3) recipient of the original is required to return the document after making use of it;
- 4) authorized body or entity demands access to the original documentation;
- 5) relevant payment is done.

The correct answer is:

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

Nr 185. A regional medical council decisions concerning the right to practice dental profession and registration of individual dental practices may be appealed to:

- A. the voivod (regional) administrative court.
- B. the Supreme Administrative Court.
- C. the commercial department of the regional court.
- D. the Supreme Medical Council.
- E. the district labor inspector.

Nr 186. Under the farmers' social insurance, an insured person is entitled to the pension for total incapacity to work on the farm if they meet the following conditions:

- A. they are totally incapable to work on the farm.
- B. they have the required contributory and non-contributory period.
- C. their inability to work occurred during their insurance period or not later than within 18 months of the termination of employment.
- D. the correct answers are: A, B.
- E. the correct answers are: A, B, C.

Nr 187. If a medical ruling on temporary incapacity to work cannot be found, the doctor who issued the ruling and acting upon a motion of the insured:

- A. makes a Xerox copy of the ruling.
- B. gives the insured the copy of the ruling.
- C. prepares an extract from the copy of the ruling.
- D. makes a photocopy of the ruling.
- E. fills out another form of the ruling.

Nr 188. The following person is entitled to apply to SIF(ZUS) for a pension for incapacity to work:

- A. insured person.
- B. employer.
- C. family doctor.
- D. specialist doctor.
- E. labour medicine specialist.

Nr 189. The insured who does not agree with the SIF(ZUS) certifying doctor's ruling is entitled to:

- A. appeal to the Court of Labor and Social Insurance.
- B. appeal to the Director of SIF(ZUS) unit.
- C. appeal to the President of SIF(ZUS).
- D. lodge an objection with the SIF(ZUS) medical board within 14 days of the date of receiving the ruling.
- E. lodge an objection with the SIF(ZUS) medical board within 30 days of the date of receiving the ruling.

Nr 190. The basic benefit period in the social insurance of employees is 182 days. If, after completing the benefit period, the insured person is still unfit for work but as a result of further treatment or rehabilitation may recover and return to their work then they are entitled to the rehabilitation benefit for a period **not exceeding**:

- A. 3 months.
- B. 5 months.
- C. 6 months.
- D. 9 months.
- E. 12 months.

Nr 191. District and Provincial Assemblies ruling on disability **do not** issue decisions concerning:

- A. slight degree of disability.
- B. moderate degree of disability.
- C. considerable degree of disability.
- D. incapacity to work.
- E. children disability.

Nr 192. In the case of a statement of fact that there are irregularities in medical rulings on temporary incapacity to work including issuing them without direct checking on the insured person's condition or without preparing proper diagnosis documentation, which gives grounds for issuing the rulings, SIF(ZUS) may withdraw its authorization to issue medical rulings for the period from the effective date of the withdrawal of **not more** than:

- A. 3 months.
- B. 5 months.
- C. 6 months.
- D. 9 months.
- E. 12 months.

Nr 193. Which statement or statements concerning mortality trend In Poland in the last 20 years is/are **false**?

- 1) in this time no significant changes in the mortality rate have been noted;
- 2) in this time significant decrease in mortality rate of newborn has been observed;
- 3) decrease in mortality from neoplastic diseases was much higher than from cardiovascular diseases;
- 4) the main reason for the decrease in the total number of deaths in Poland was the significant reduction of deaths from traffic accidents and injuries;
- 5) the main reason for the significant reduction in the total number of deaths in Poland was the significant reduction of deaths from cardiovascular diseases.

The correct answer is:

A. all the answers are false. **B.** 1,3. **C.** 1,3,4. **D.** only 1. **E.** 2,3,4,5.

Nr 194. The latest data from epidemiological studies published in Poland demonstrate that **the most prevalent** cardiovascular risk factors are:

- A.** smoking and overconsumption of alcohol.
- B.** hypertension and diabetes.
- C.** hypercholesterolaemia, sedentary life style and obesity.
- D.** obesity and diabetes.
- E.** magnesium, calcium and vit.D deficiency in everyday diet.

Nr 195. Based on the results of Fagerström test – 3 points and Schneider motivation tests – 3 points one can conclude in a 40-year-old man (smoker):

- A.** ischemic heart disease is highly probable due to his habitual smoking.
- B.** strong reduction of cognitive skills due to years of smoking.
- C.** strong pharmacological dependence and strong motivation to quit smoking.
- D.** weak pharmacological dependence and weak motivation to quit smoking.
- E.** a high risk for increasing the number of cigarettes smoked.

Nr 196. According to WHO experts in 2030 the most prevalent mortality reasons in countries with high and medium level of development (including Poland) will be:

- A.** tuberculosis and AIDS.
- B.** injuries, traffic injuries and suicides.
- C.** stomach and colon cancers.
- D.** diabetes, metabolic syndrome and obesity.
- E.** ischemic heart diseases and cerebrovascular diseases.

Nr 197. The objective measures of population health status include:

- 1) newborns mortality rate;
- 2) standardized mortality rate due to cardiovascular diseases;
- 3) average life expectancy;
- 4) standardized mortality rate due to neoplastic diseases;
- 5) opinion of the Ministry of Health.

The correct answer is:

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

Nr 198. Which statements concerning the determinants of population health is **false**?

- 1) education level is an important factor determining population health;
- 2) work environment has no significant effect on the health of employees;
- 3) age and sex are the determinants of several chronic diseases;
- 4) lack of social support is an important factor in etiology and pathogenesis of several cardiovascular diseases;
- 5) water and air pollution are among important factors determining population health.

The correct answer is:

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

Nr 199. Which statement or statements concerning physical activity in health promotion and disease prevention is/are true?

- 1) regular physical activity is important for proper development of children and youth;
- 2) regular physical activity reduces the risk of diabetes type I;
- 3) strenuous exercise not adequate for the person's age and health status could be a direct reason of myocardial infarction or cardiac arrest;
- 4) regular physical activity is important in osteoporosis prevention;
- 5) regular physical activity does not influence the prevalence of overweight or obesity in children and adults.

The correct answer is:

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

Nr 200. Which statement or statements concerning health promotion is/are **false**?

- 1) health promotion is a process enabling people to control better their own health;
- 2) health promotion addresses mainly individuals at risk of diseases and sick persons;
- 3) only physicians, dentists and other health professionals are responsible for health promotion activities;
- 4) Ottawa Charter is the fundamental document for health promotion;
- 5) settlement attitude to health promotion means that health promotion activities could be carried out in schools, hospitals, sports clubs and prisons.

The correct answer is:

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

Thank you!