

**Nr 1.** In which of the following the pulp **does not** respond to pulp tests?

- 1) reversible pulpitis;
- 2) irreversible pulpitis;
- 3) necrotic pulp;
- 4) chronic apical periodontitis;
- 5) acute apical abscess.

The correct answer is:

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

**Nr 2.** Which of the following may respond to percussion?

- 1) reversible pulpitis;
- 2) irreversible pulpitis;
- 3) acute apical periodontitis;
- 4) acute apical abscess;
- 5) chronic apical abscess.

The correct answer is:

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

**Nr 3.** The application of calcium hydroxide on the pulp causes the necrosis of pulp tissue on the surface layer in contact because calcium hydroxide inhibits intracanal bacterial growth and alters the biologic properties of bacterial lipopolysaccharide.

- A.** both sentences are true and logically connected.  
**B.** both sentences are true but not connected logically.  
**C.** first sentence is true, the second is false.  
**D.** first sentence is false, the second is true.  
**E.** both sentences are false.

**Nr 4.** Which of the following about “walking bleach” method are correct?

- 1) concerns endodontically treated teeth;
- 2) concerns vital teeth;
- 3) uses 3% hydrogen peroxide;
- 4) uses sodium perborate;
- 5) uses 30% hydrogen peroxide.

The correct answer is:

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

**Nr 5.** The adhesion of composite resin materials to dentin is hampered by:

- 1) presence of the smear layer;
- 2) presence of the hybrid layer;
- 3) histological structure of dentin;
- 4) chemical composition of dentin;
- 5) infiltration of adhesive resin to demineralised intra- and intertubular dentin.

The correct answer is:

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

**Nr 6.** Which of the following considering caries diagnosis of occlusal surfaces with the use of a sharp dental explorer **is not** correct?

- A.** binding of the explorer in the fissure is always caused by carious decay.  
**B.** binding of the explorer in the fissure can be due to the shape of the fissure.  
**C.** use of the explorer is not indicated for the diagnosis of occlusal caries.  
**D.** use of the explorer may cause damage to the surface layer of enamel.  
**E.** use of the explorer in caries diagnosis should be limited to removing food remnants from the examined region.



**Nr 12.** Which of the following describes the proper root canal obturation of the tooth with periapical pathology:

- A. it reaches up to the radiological apex of the root.
- B. it reaches 0.5-1 mm from the radiological apex of the root.
- C. it reaches 1.5-2.5 mm from the radiological apex of the tooth.
- D. it is beyond the radiological apex of the root with slight overfilling of the sealer but without overfilling the gutta-percha.
- E. it is beyond the radiological apex of the root with overfilling of the sealer and the gutta-percha.

**Nr 13.** Which of the following statements considering root canal preparation with the use of crown-down (step-down) technique are correct?

- 1) it provides the conical shape of the root canal;
- 2) it facilitates the access to the apical part of the root, especially in curved canals;
- 3) it makes it possible to initially remove a considerable volume of the tissue from the root canal;
- 4) root canal preparation is improved when a file is turned about 90-180° clockwise, and then is turned about 120-360° anticlockwise;
- 5) widening of the root canal with the use of the file size 25-30 finishes the root canal preparation along the working length.

The correct answer is:

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

**Nr 14.** In the course of the root canal treatment EDTA is used to:

- A. widen the obliterated canals due to decalcification.
- B. remove the smear layer from the canal walls.
- C. eliminate the bacteria.
- D. remove some organic components from the canal content.
- E. lubricate the canal walls.

**Nr 15.** Which of the following clinical symptoms can be observed in irreversible pulpitis?

- 1) episodes of continuous pain;
- 2) spontaneous pain;
- 3) no response to cold;
- 4) prolonged response to cold;
- 5) diffused pain, difficult to localize.

The correct answer is:

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

**Nr 16.** Which of the following is intracanal medicament suppressing inflammation and used for decreasing postoperative pain during endodontic treatment:

- A. chlorhexidine.
- B. formocresol.
- C. glucocorticosteroids.
- D. iodine.
- E. glutaraldehyde.

**Nr 17.** Which of the following statements concerning calcium hydroxide used as intracanal medicament is **false**?

- A. it shows antimicrobial activity.
- B. it has alkaline pH.
- C. it dissolves necrotic tissue remnants.
- D. it is recommended for teeth with necrotic pulp.
- E. it allows better adherence of obturating materials to canal walls.

**Nr 18.** Female, aged 35, came to the dental office complaining of the elevation of oral mucosa in the apical region of 46, on the buccal side of the tooth. The change was not painful. During examination, when the elevation was pressed purulence appeared from the sinus tract first, and then was followed by purulence with blood. The most probable diagnosis is:

- A. apical cyst.
- B. acute apical abscess.
- C. chronic apical abscess.
- D. condensing osteitis.
- E. hyperplastic pulpitis.

**Nr 19.** Female, aged 35, came to the dental office complaining of the elevation of oral mucosa in the apical region of 46, on the buccal side of the tooth. The change was not painful. During examination, when the elevation was pressed purulence appeared from the sinus tract first, and then was followed by purulence with blood. What kind of treatment should be performed?

- A. pulpotomy.
- B. pulpectomy.
- C. opening for drainage.
- D. necrotic pulp removal, calcium hydroxide intracanal dressing placement.
- E. soft tissue incision, antibiotic administration.

**Nr 20.** Female, aged 35, came to the Dental Office complaining of the elevation of oral mucosa in the apical region of 46, on the buccal side of the tooth. The change was not painful. During examination, when the elevation was pressed purulence appeared from the sinus tract first, and then was followed by purulence with blood. Choose the most recommended method that will help in finding tooth responsible for the development of the change:

- A. change location.
- B. patient's history.
- C. pulp vitality testing.
- D. X-ray with sinus tract traced with gutta-percha point.
- E. periapical radiograph.

**Nr 21.** Which of the following is true concerning pulp stones?

- A. can develop in response to external irritation.
- B. are localized only in pulp chamber.
- C. are localized only in root canal.
- D. often result in external resorption development.
- E. are always attached to the canal or pulp chamber wall.

**Nr 22.** A young woman came to the dental office for examination, before breast cancer therapy. A panoramic X-ray was taken, and round apical radiolucency was discovered at the apex of tooth 46. What is the most important aid in distinguishing if the periradicular lesion is of endodontic or different origin?

- A.** lesion appearance on the periapical x-ray. **D.** pulp vitality testing.  
**B.** lesion size on the periapical x-ray. **E.** color of the crown of the tooth.  
**C.** patient's history.

**Nr 23.** Which of the following excludes endo-perio (the inflammatory process which develops as primary periodontal disease with secondary endodontic progression):

- A.** wide pocket with dental plaque and calculus accumulation.  
**B.** marginal gingivitis.  
**C.** symptoms typical of inflamed or necrotic pulp.  
**D.** no pathology noted on the radiographic picture.  
**E.** angular bone loss around one or several teeth noted on the radiographic picture.

**Nr 24.** Indicate true statements concerning chlorhexidine:

- 1) dissolves necrotic tissue inside the root canal;
- 2) possesses a broad spectrum of antimicrobial activity;
- 3) combined with NaOCl removes the smear layer;
- 4) the best way to use as an irrigant – directly after NaOCl;
- 5) is more effective against *E. faecalis* than NaOCl;
- 6) in endodontic treatment it is used at a concentration of 2%.

The correct answer is:

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

**Nr 25.** Where should you search for the fourth root canal orifice in the first maxillary molar tooth?

- A.** between the orifices of the buccal canals.  
**B.** between distobuccal canal orifice and lingual canal orifice.  
**C.** lingually and slightly mesially from the mesiobuccal canal.  
**D.** in the central part of the pulp chamber bottom.  
**E.** first maxillary molar tooth always has 3 canals.

**Nr 26.** During endodontic treatment of tooth 13 you try to establish working length with K-reamer No 35, length 25 mm. Though you put the instrument several times for its whole length inside the root canal the electronic apex locator still does not show the "apex" point. The X-ray taken with the instrument inside the root canal reveals that the instrument tip is 2 mm shorter than the root length. How should you proceed?

- A.** preparation should be finished at this stage because the root canal is unusually long and it is impossible to prepare it entirely because of lack of longer instruments.  
**B.** it is necessary to use ultrasonics because the apical region may be cleaned only in this way considering the untypical root canal length.  
**C.** it is necessary to take an X-ray again, because during the first projection the instrument was surely moved.  
**D.** it is necessary to use Ni-Ti files, because only these instruments are longer.  
**E.** it is possible to use a hand instrument of 31 mm in length.

**Nr 27.** Which irrigant has a significant role in the elimination of persistent microorganisms during endodontic treatment?

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

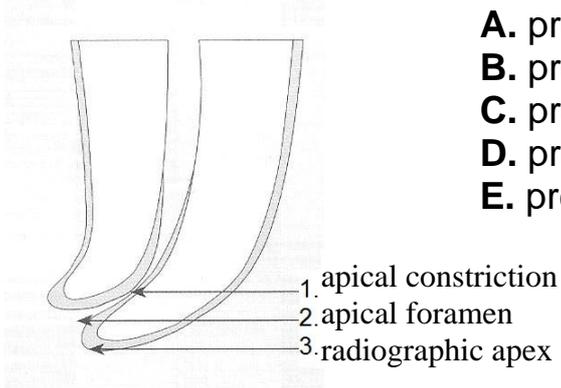
**Nr 28.** How long should the master gutta-percha cone length be?

- A. it should be 0.5 mm longer than the prepared working length.
- B. it should not be shorter of more than 1.5 mm than the prepared working length.
- C. it should not be longer of more than 1 mm than the prepared working length.
- D. it should not be shorter of more than 1 mm than the prepared working length.
- E. both lengths should always be equal.

**Nr 29.** A 55-year-old female patient presents to the dentist for endodontic treatment in tooth 25. Her medical history includes past infective endocarditis and allergy to penicillin. According to the American Heart Association recommendations the patient should obtain preoperatively:

- A. 2 g of amoxicillin – 1 hour before the procedure.
- B. 600 mg of clindamycin – 1 hour before the procedure.
- C. 500 mg of augmentin – 2 hours before the procedure.
- D. 500 mg of ampicillin – 2 hours before the procedure.
- E. 100 mg of erythromycin – 1 hour before the procedure.

**Nr 30.** According to current principles the root canal should be:



- A. prepared to the point 2, obturated to the point 1.
- B. prepared to the point 2, obturated to the point 3.
- C. prepared and obturated to the point 1.
- D. prepared and obturated to the point 2.
- E. prepared and obturated to the point 3.

**Nr 31.** On the X-ray of tooth 11 in a 20-year-old patient you can see the absence of periodontal ligament space and bone fusing directly to the root surface. Clinical examination reveals the lack of physiologic mobility and a metallic sound on percussion. The patient says that the tooth was avulsed more than one year ago. What should you diagnose?

- A. chronic apical periodontitis.
- B. bone tissue concentration.
- C. internal root resorption.
- D. reimplantation.
- E. ankylosis.

**Nr 32.** Packing calcium hydroxide paste in the pulp chamber after finishing bleaching of endodontically treated tooth is aimed at:

- A. avoiding future rediscoloration.
- B. prevention of possible resorption.
- C. preserving the bleaching effect.
- D. final disinfection of the pulp chamber.
- E. prevention of postoperative sensitivity.

**Nr 33.** Which of the following statements describes the diagnosis of early caries lesion:

- A. explorer tip binding is always the evidence of caries cavitation.
- B. demineralised enamel appears chalky or opaque after drying with compressed air.
- C. justifiable use of a proper explorer during tooth examination may lead to cavitation.
- D. discoloration of pits and grooves is a sufficient indication for a diagnosis of caries.
- E. use of a dental probe is the easiest way to detect an early lesion on a proximal surface.

**Nr 34.** Which of the following sentences concerning saliva is true:

- A. phosphoric acid/phosphate plays the main buffering role.
- B. antihistamine medications and diuretics do not influence the salivary flow.
- C. patients treated with antidepressants may experience disorders in saliva production.
- D. lysozyme, lactoferrin and estriol show antibacterial activity.
- E. all the answers are correct.

**Nr 35.** Which of the following adhesive systems are currently used?

- A. three-step, total-etch adhesives.
- B. one-bottle, total-etch adhesives.
- C. self-etching primer systems.
- D. all-in-one self-etching adhesives.
- E. all the above are currently used.

**Nr 36.** Which of the following **is not** a risk factor for dental caries?

- A. high *Lactobacillus* count.
- B. high *Streptococcus mutans* count.
- C. decreased saliva flow rate.
- D. saliva with high buffering capacity.
- E. low concentration of hypothiocyanite in the saliva.

**Nr 37.** Which of the following describes the defensive action of salivary glycoproteins (mucins) that slows dental plaque accumulation?

- A. they may cause the agglutination of bacteria resulting in the reduction of *Streptococci* in the oral cavity.
- B. mucins tie up free iron and inhibit the growth of some iron-dependent microbes.
- C. they lyse cells by the degradation of cell walls.
- D. they catalyse hydrogen peroxide-mediated oxidation (blocking the metabolism of bacteria).
- E. all of the above.

**Nr 38.** Which of following dietary carbohydrates is the most cariogenic?

- A. glucose.
- B. sucrose.
- C. starch.
- D. fructose.
- E. maltose.

**Nr 39.** Which of the following restorative materials have the best polishability?

- A. conventional composites.
- B. microfill composites.
- C. hybrid composites.
- D. conventional glass-ionomers.
- E. resin-modified glass-ionomers.

**Nr 40.** To obtain retention for amalgam restoration in Black's class II cavity one should:

- A. prepare cavity walls divergently to the occlusal surface.
- B. prepare cavity walls convergently to the occlusal surface.
- C. prepare retention grooves in the cervical region.
- D. use pins regardless of the extent of the destruction of the tooth crown tissue.
- E. make a groove in the buccal and lingual wall with a fissure bur.

**Nr 41.** Find the correct definition of preventive resin restoration (PRR):

- A. restoration of the lesion with removal of only carious tooth structure and often may be combined with the use of composite or sealant to seal non-carious fissures.
- B. restoration of the lesion and carious fissures with minimal removal of tooth structure.
- C. pit and fissure sealant placement.
- D. restoration of a small lesion on the occlusal surface with glass-ionomer.
- E. restoration of a small lesion with a composite and putting varnish on the occlusal surface.

**Nr 42.** Find the **false** statement concerning sclerotic dentin:

- A. it results from mild external irritation associated with slowly advancing caries or caries treatment.
- B. the peritubular dentin becomes wider, gradually filling the tubules with calcified material.
- C. sclerotic dentin areas are harder, less sensitive to subsequent irritations.
- D. it is formed by replacement odontoblasts.
- E. it develops within primary dentin.

**Nr 43.** The most common epidemiologic measure of caries is DMFT. Find the proper definition of the DT component:

- A. it is a component of DMFT, standing for the number of diseased permanent teeth with primary, secondary caries and temporary dressings.
- B. it is a component of DMFT, standing for the number of permanent teeth lost or extracted due to caries.
- C. it is a component of DMFT, standing for the number of permanent teeth with one or more restorations.
- D. it is a component of DMFT, standing for the presence of the past ongoing process of caries.
- E. it is impossible to describe separately the DT component.

**Nr 44.** What is the proper order of zones in a microscope cross-section enamel image with incipient caries, starting from the surface of the enamel:

- A. surface zone, the body of the lesion, dark zone and translucent zone.
- B. surface zone, dark zone, the body of the lesion and translucent zone.
- C. surface zone, dark zone, translucent zone and the body of the lesion.
- D. translucent zone, surface zone, the body of the lesion and dark zone.
- E. surface zone, light zone, the body of the lesion and translucent zone.

**Nr 45.** Find the proper definition of attrition:

- A. chemical and mechanical wear or loss of the tooth surface.
- B. abnormal surface loss due to direct friction forces between the teeth and external object.
- C. cervical, wedge shaped defects formed as a response to strong eccentric occlusal forces.
- D. physiological wear of the tooth incisal or occlusal and proximal surfaces resulting from tooth-to-tooth contact.
- E. abnormal tooth loss resulting from frictional forces between contacting teeth components in the presence of an abrasive medium.

**Nr 46.** A restoration technique in class II, III, IV and V according to Black with the use of glass-ionomer as a liner under some composite restoration is called:

- A. composite tunnel tooth restoration.
- B. sandwich technique.
- C. key-hole technique.
- D. Cerec technique.
- E. PRR technique.

**Nr 47.** In the morphology of primary teeth:

- 1) the shape of the maxillary lateral incisor is similar to that of the central one, but the crown is smaller in all dimensions;
- 2) the shape of the mandibular lateral incisor is similar to that of the central one but is somewhat larger in all dimensions;
- 3) the root of the maxillary canine is the longest among all one-rooted teeth;
- 4) maxillary first and second molars usually have three roots;
- 5) mandibular first and second molars usually have two roots.

The correct answer is:

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

**Nr 48.** Amoxicillin should be strictly avoided in children with:

- A. mumps.    B. measles.    C. rubella.    D. mononucleosis.    E. herpangina.

**Nr 49.** The tongue with easily removable white patches on the erythematous and bleeding base is found in a boy aged 4. That situation can be caused by:

- A. *Candida albicans*.
- B. *Herpes simplex infection*.
- C. geographic tongue.
- D. mercury poisoning.
- E. leukaemia.



**Nr 55.** Find the **false** statement regarding external replacement resorption:

- A. the most common cause is tooth replantation.
- B. the bone replacement is faster than the recolonization of fibroblasts.
- C. there is no effective method of treatment.
- D. the tooth appear to be rock solid.
- E. the most effective treatment is based on initial root canal dressing with calcium hydroxide.

**Nr 56.** In a patient, aged 15, a stimulated salivary flow was evaluated. During 5 minute period 8 ml of saliva was collected. In the patient the flow of saliva is:

- A. 10-times lower than the normal rate.
- B. 2-times lower than the normal rate.
- C. of the normal rate.
- D. 2-times higher than the normal rate.
- E. 10-times higher than the normal rate.

**Nr 57.** In which of the syndromes given below the oral manifestation is dentinogenesis imperfecta type I:

- A. osteogenesis imperfecta.
- B. amelogenesis imperfecta.
- C. ectodermal dysplasia.
- D. odontodysplasia.
- E. vitamin-D resistant rickets.

**Nr 58.** Pinkish discoloration of a permanent tooth appearing immediately after trauma:

- 1) usually resolves spontaneously;
- 2) is a symptom of internal resorption;
- 3) indicates necrosis of the pulp;
- 4) usually occurs after a severe trauma;
- 5) has no influence on the pulp's reaction to cold stimuli.

The correct answer is:

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

**Nr 59.** Premature exfoliation and the loss of primary teeth can be found in:

- 1) hypopituitarism;
- 2) vitamin-D resistant rickets;
- 3) hypophosphatasia;
- 4) prepubertal periodontitis;
- 5) osteogenesis imperfecta.

The correct answer is:

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

**Nr 60.** Find the characteristic features of amalgam restoration used in primary teeth in children:

- 1) it is durable and resistant to mechanical forces;
- 2) it is a preferable material for Black class II lesion, with huge loss of hard tooth tissue;
- 3) it is the material which is the least sensitive to moisture;
- 4) recurrent caries is less common than in the case of other materials;
- 5) lining is required in all types of carious lesions.

The correct answer is:

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

**Nr 61.** Premature eruption of milk teeth is observed in:

- A. glycogen storage diseases.
- B. hypopituitarism.
- C. vitamin A deficiency syndrome.
- D. Ellis-van Creveld syndrome.
- E. Down syndrome.

**Nr 62.** Supernumerary teeth are often associated with:

- A. ectodermal dysplasia.
- B. polydactyly.
- C. Down syndrome.
- D. Rieger syndrome.
- E. cleidocranial dysplasia.

**Nr 63.** Choose the tests used for evaluating the state of periapical tissues:

- 1) cold stimuli;
- 2) electric pulp test;
- 3) percussion;
- 4) alveolar bone palpation;
- 5) transillumination.

The correct answer is:

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

**Nr 64.** "Tell-show-do" is a technique of reducing dental anxiety in a child on dental chair that centres on:

- A. ignoring bad behavior of the child and then redirecting his/her attention to some pleasant things.
- B. explaining the procedures to the child, then demonstrating and performing them.
- C. letting the child to observe the consequences of other people's behavior.
- D. using some verbal encouragements to promote good behavior and gradually reducing the control over the child.
- E. talking to the parents, showing them the procedures and then simulating them in one parent in the presence of the child.

**Nr 65.** Because of a risk of Reye's syndrome in the case of a pain in children under 12 years of age a dentist **should avoid** prescribing:

- A. paracetamol.
- B. ibuprofen.
- C. aspirin.
- D. codeine.
- E. morphine.

**Nr 66.** Indication(s) for pulpotomy in a primary tooth is/are:

- 1) pulpal exposure due to the removal of caries;
- 2) haemorrhage from the radical tissue which is easy to control;
- 3) history of spontaneous pain (no longer than 2 days);
- 4) presence of fistula;
- 5) presence of oedema.

The correct answer is:

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

**Nr 67.** To prevent fluorosis, the maximal level of fluoride in drinking water in a mild climate should be:

- A. 0.3 mg F/L.
- B. 0.5 mg F/L.
- C. 1 mg F/L.
- D. 2 mg F/L.
- E. 3.5 mg F/L.

**Nr 68.** Calculate the dose of fluoride in mg/kg of body weight, ingested by a 2-year-old child who weighs 10 kg and ate 100 grams of toothpaste that contains 500 ppm of fluoride:

- A. 0.5 mg/kg.    B. 1 mg/kg.    C. 5 mg/kg.    D. 50 mg/kg.    E. 1 g/kg.

**Nr 69.** Classic ART method (Atraumatic Restorative Treatment method) is based on:

- A. removing caries with hand instruments and making a restoration of self-cured glass-ionomer materials.  
B. limiting the usage of rotating instruments to the opening of a caries lesion, removing caries with an excavator, making a restoration of amalgam.  
C. softening the carious tissues with special chemical agents, removing caries with an excavator, making a restoration of amalgam.  
D. removing caries with rotating instruments making the least possible opening, making a restoration of light-cured composite material, sealing the remaining fissures.  
E. removing caries using air-abrasion, making a restoration of self-cured glass-ionomer materials.

**Nr 70.** In a young patient for the restoration of a single, small cavity reaching the outer layer of dentine on occlusal surface of the first permanent molar the following should be used:

- A. amalgam.    D. glass-ionomer as lining and composite material.  
B. composite material.    E. preventive resin restoration PRR (composite and fissure sealing).  
C. glass-ionomer cement.

**Nr 71.** Extraction of a pulpless milk tooth is not indicated in the case of:

- A. haemophilia disease.    D. asthma.  
B. diabetes mellitus.    E. cardiovascular diseases.  
C. leukaemia.

**Nr 72.** A boy, aged 7, with deep carious lesion, class II by Black, in tooth 75 comes to the dental surgery. During the preparation of the cavity the pulp was exposed. The pulp is light red, slightly bleeding and reacts to probing properly. An x-ray shows no pathologic changes. The treatment should be:

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

**Nr 73.** To diagnose lesions on the occlusal surfaces of deciduous teeth the following may be applied:

- 1) bitewing radiographs;    4) laser fluorescence device (Diagnodent);  
2) fibre-optic transillumination;    5) Laser Doppler Flowmetry (LDF method).  
3) temporary teeth separation;

The correct answer is:

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





**Nr 86.** Which of the following concerning Sluder's syndrome are true:

- 1) must be differentiated with trigeminal neuralgia – episodic pain occurring mainly in trigeminal neuralgia is a differentiating feature;
- 2) it develops as a consequence of dental procedures performed on the maxilla or of laryngological procedures performed on the maxillary sinus;
- 3) sometimes the excision of the sphenopalatine ganglion is a treatment of choice;
- 4) ganglion diseases may lead to disorders of the exocrine gland secretion of the oral cavity, nasal sinuses and lacrimal glands;
- 5) in the treatment of neuralgia, the blockade of the greater palatine foramen (e.g. with lignocaine) can be used.

The correct answer is:

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

**Nr 87.** Which of the following is/are true?

- 1) acute purulent sialoadenitis most frequently affects the submandibular glands;
- 2) Sjögren syndrome is a frequent consequence of chronic parotitis leading to the destruction of the endocrine glands because of lymphocyte infiltration;
- 3) acute parotitis frequently affects chronically ill patients requiring long-lasting hospitalization;
- 4) facial palsy is a characteristic sign of acute parotitis;
- 5) not only antibiotics but also total parotidectomy may be required in the treatment of chronic parotitis.

The correct answer is:

- A.** all the above.      **B.** none of the above.      **C.** only 3.      **D.** only 4.      **E.** only 5.

**Nr 88.** Which of the following are true?

- 1) the first segment of the maxillary artery, which is in the region of mandible neck, gives branches to: profound auricular artery, inferior alveolar artery, anterior tympanic and middle meningeal arteries;
- 2) mental artery is a terminal branch of the alveolar artery;
- 3) buccal artery is a branch of the facial artery;
- 4) infraorbital artery crosses the inferior orbital fissure;
- 5) superior alveolar arteries branch from infraorbital artery and from the third segment of maxillary artery.

The correct answer is:

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

**Nr 89.** Maxillary sinusitis, developing on the basis of a foreign body cramming in or of oral-maxillary junction (fistula), may cause orbital complications. Which of the following require in-hospital treatment:

- 1) subperiosteal abscess;
- 2) orbital tissues inflammation;
- 3) orbital abscess;
- 4) inflammatory eyelid oedema;
- 5) superior orbital fissure syndrome.

The correct answer is:

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

**Nr 90.** Non-odontogenic epithelial developmental cysts include:

- A. cysts of the nasopalatine duct, medial maxillary, globulomaxillary, nasolabial cysts.
- B. haemorrhagic, aneurismal cyst.
- C. epidermal, dermoid, retention cyst.
- D. lateral cervical cyst, medial cervical cyst.
- E. keratocyst, paradental cyst.

**Nr 91.** Which of the following are true?

- 1) odontomas are one of mixed odontogenic tumors because they contain epithelial and mesenchymal components;
- 2) odontomas belong to the biggest group of odontogenic neoplasms;
- 3) compound and complex odontomas are the two basic types of odontomas;
- 4) erupted odontoma and complex odontoma are the two specific types of odontomas;
- 5) multifocal odontomas can be one of the elements of familial adenomatous polyposis.

The correct answer is:

- A. all the above.    B. 1,3,4,5.    C. none of the above.    D. 3,4,5.    E. 1,4,5.

**Nr 92.** Which of the following concerning tongue carcinoma is/are false?

- 1) in 2/3rd of cases it develops in the anterior mobile part of the tongue;
- 2) it gives deep cervical lymph node metastases early;
- 3) it does not cause pain even in advanced stages;
- 4) throat ache can be the first symptom of tongue carcinoma;
- 5) brachytherapy is one of the treatment options.

The correct answer is:

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

**Nr 93.** A 62-year-old female patient complains of xerostomia and impaired lacrimation. Physical examination reveals: hard, bilateral, not painful enlargement of the lacrimal and salivary glands. The affected glands on palpation seem lobulous and little movable relative to the basis. The patient does not present any general symptoms or changes in a blood cell count. From the anamnesis it is known that it is a chronic disease. These data suggest the diagnosis of:

- A. Heerfordt's syndrome.
- B. Sjögren syndrome.
- C. Mikulicz syndrome.
- D. salivary gland tuberculosis.
- E. Warthin tumor.

**Nr 94.** A 45-year-old female complains of a painless pedunculated, cauliflower-shaped tumor penetrating into the interdental space between teeth 13 and 14. This is the cyanotic-red easily bleeding tumor that caused looseness of neighboring teeth. On X-ray there is regular osteolytic lesion around the base of the tumor. The most probable diagnosis is:

- A. epulis fibrosa.
- B. epulis granulomatosa.
- C. granuloma fissuratum.
- D. giant cell granuloma.
- E. giant cell granuloma central, reparative.

**Nr 95.** The following are the classical symptoms of intracranial hypertension associated with brain oedema:

- 1) somnolence;
- 2) bradycardia;
- 3) respiratory dysfunction;
- 4) nausea and vomiting;
- 5) increase in arterial blood pressure.

The correct answer is:

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

**Nr 96.** Which of the following sentences regarding safety use of drugs during pregnancy are true:

- 1) all local anesthetics cross placental barrier;
- 2) lidocaine and articaine are the safest local anesthetics;
- 3) the safest antibiotics during pregnancy include amoxicillin and clindamycin;
- 4) among painkillers only aspirin is safe during pregnancy;
- 5) all tetracyclines are contraindicated during pregnancy.

The correct answer is:

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

**Nr 97.** The author(s) of cryoanesthesia is(are):

- A.** Celsus.      **D.** Batholimus and Costa.  
**B.** Guy de Chauliac.      **E.** Cieszynski.  
**C.** Perzyna and Heister.

**Nr 98.** While tapping the crown of the tooth in a transversal direction, you can palpate the thrill of the root under your finger put on the mucosa of the dental process near the apex of the root. This is:

- A.** percussion test.      **D.** Owinski's sign.  
**B.** Smreker's test.      **E.** assessment of the looseness of a tooth.  
**C.** acoustic test.

**Nr 99.** An easy method used in dental radiology, not affecting a patient by a high radiation dose, is based on a phenomenon of:

- A.** parallax.      **D.** amplification of radiation.  
**B.** bidirectional feedback.      **E.** correct answers are B and D.  
**C.** forced emission.

**Nr 100.** Which of the following is the inherited disorder characterized by multiple café-au-lait skin spots and skeletal changes:

- A.** marble bone disease.      **D.** syndrome of basocellular changes.  
**B.** neurofibromatosis.      **E.** Treacher-Collins-Franceschetti syndrome.  
**C.** Crouzon syndrome.

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

**Nr 101.** The dose of this drug in premedication in adults – 7.5 mg orally should be given 60-90 minutes before the procedure. This is:

- A. diazepam.    B. lorazepam.    C. flumazenil.    D. fentanyl.    E. midazolam.

**Nr 102.** Which disease causes the infection and necrosis of peri- and intraparotid lymph nodes and leads to the development of abscesses?

- A. sialoadenitis in granulomatous diseases.    D. toxoplasmosis.  
B. actinomycosis.    E. correct answers are C and D.  
C. cat-scratch disease.

**Nr 103.** Kutner's tumor, disease described in 1896, is the following:

- A. chronic purulent sialoadenitis.    D. chronic, sclerosing submandibular sialoadenitis.  
B. viral sialoadenitis.    E. cytomegalovirus infection.  
C. mumps.

**Nr 104.** Peridens is:

- A. mesiodens located between the upper central incisors.  
B. retromolar (distomolar) tooth located distally to the third molars.  
C. perimolar tooth localized between normal molars.  
D. additional tooth.  
E. additional/supernumerary tooth located on the lingual or buccal surface of the alveolar arch.

**Nr 105.** Two teeth strictly joined as a result of the division of one tooth bud are:

- A. gemini teeth.    D. tooth in a tooth.  
B. fused teeth.    E. taurodont teeth.  
C. conjoined teeth.

**Nr 106.** A patient with serious systemic disease significantly limiting his/her fitness should be assigned according to ASA scale (American Society of Anesthesiologists) to the group:

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

**Nr 107.** Which of the following mucocutaneous disorders **does not** cause gingival manifestations according to AAP's 1999 classification?

- A. lichen planus.    D. leukoplakia.  
B. pemphigoid.    E. erythema multiforme.  
C. pemphigus vulgaris.

**Nr 108.** Systemic antibiotic therapy is indicated in:

- A. plaque-induced gingivitis.    D. desquamative gingivitis.  
B. acute necrotizing and ulcerative gingivitis.    E. all the above.  
C. drug-induced gingivitis.

**Nr 109.** GTR acronym means using of:

- A. electrotomy.
- B. barrier membrane.
- C. RT-YAG laser.
- D. B and C.
- E. all the above.

**Nr 110.** Which of the following **do not** have the direct influence on the metabolism of connective and bone tissues?

- A. cytokines.
- B. prostanoids.
- C. matrix metalloproteinases.
- D. lipopolysaccharides.
- E. all the above have the direct influence.

**Nr 111.** In modified Bass's toothbrushing method a toothbrush is put on the tooth:

- A. at a right angle.
- B. at a 45 degree angle, bristles in coronal direction.
- C. at a 45 degree angle, bristles in apical direction.
- D. at an angle between 60-75 degrees, bristles in coronal direction.
- E. at an angle between 60-75 degrees, bristles in apical direction.

**Nr 112.** Orange complex (cluster) according to Socransky **does not** include:

- A. *P. intermedia*.
- B. *P. nigrescens*.
- C. *P. micra*.
- D. *F. nucleatum*.
- E. *T. denticola*.

**Nr 113.** Which of the following causes drug-induced gingivitis?

- A. phenytoin.
- B. dihydropyridine.
- C. cyclosporine.
- D. all the mentioned.
- E. none of the above.

**Nr 114.** Epithelial attachment:

- A. constitutes the bottom of the gingival groove.
- B. is not actinic.
- C. is damaged by even a slight trauma.
- D. is 1 mm long.
- E. all the answers are correct.

**Nr 115.** Köbner phenomenon is:

- A. incidence of Wickham's striae.
- B. „saw-tooth” appearance of the rete pegs.
- C. incidence of papules precipitated by a mechanical trauma.
- D. bronze staining of the mucous membrane.
- E. rupture of a bulla.

**Nr 116.** Neoplastic transformation in leukoplakia is caused, among other things, by:

- A. HSV1.
- B. HSV2.
- C. HSV3.
- D. HSV4.
- E. HPV.

**Nr 117.** Secondary lesions **don't** include:

- A. pustula.
- B. ulcer.
- C. erosion.
- D. scab.
- E. all the above.

**Nr 118.** Primary lesion in zoster is:

- A. macule.      B. papule.      C. vesicle.      D. bulla.      E. pustule.

**Nr 119.** The role of an infectious agent of erythema multiforme is played by:

- A. HSV1.      B. HSV2.      C. HSV3.      D. B and C.      E. HSV4.

**Nr 120.** Sjögren syndrome accompanies connective tissue diseases such as:

- A. rheumatoid arthritis.      D. scleroderma.  
B. systemic lupus erythematosus.      E. all the above.  
C. polymyositis.

**Nr 121.** Facial examination from the frontal view (en face) consists in the evaluation of:

- A. position of the incisors.      D. nasolabial angle value.  
B. SNA angle value.      E. tongue activity.  
C. vertical relation of the lips.

**Nr 122.** The Bolton's index describes:

- A. proclination of the upper incisors.  
B. length of the dental arch circumference in relation to the sum of the mesiodistal widths of 12 permanent teeth in the maxilla and the mandible.  
C. correlation between the upper dental arch width and the upper – facial width.  
D. correlation between the sum of the permanent upper and lower incisor widths.  
E. correlation between the mesiodistal widths of the permanent teeth in the maxilla and the mandible.

**Nr 123.** Using metric analysis the height of the palate is assessed on:

- A. direct clinical examination.  
B. index of the height of the palate.  
C. relation between the apical base span and the dental arch length.  
D. Pont's measurements.  
E. Moyers' index.

**Nr 124.** The growth potential is:

- A. rate of expected growth.  
B. primary dentition for permanent teeth replacement period.  
C. patient's motivation for orthodontic treatment.  
D. continuity of the face skeleton growth direction.  
E. symptoms of bone maturation of the wrist.

**Nr 125.** The structural method of lateral cephalograms analysis is used to evaluate:

- A. growth tendencies of the mandible.  
B. contour of anterior border of the Turkish saddle (sella turcica).  
C. constriction of the maxilla.  
D. mesial drift of the molars.  
E. outline of the anterior cranial base.

**Nr 126.** The feature of Metzelder appliance is/are:

- A. unveiling of the palate.
- B. buccal loop on the teeth in scissors bite.
- C. springs connecting the upper and lower plate.
- D. vestibular shields.
- E. lingual arch.

**Nr 127.** The group of congenital facial malformations with the decisive role of genetic factors includes:

- A. TMJ problems.
- B. chromosome aberration syndromes.
- C. dental malocclusions and dental malformations.
- D. secondary crowding.
- E. none of the above.

**Nr 128.** The enamel reduction on the contact surfaces of the permanent teeth:

- 1) can be used for aesthetic correction of tooth crown shapes;
- 2) should not be used because it removes the richest in fluoride enamel layer;
- 3) eliminates the indications for the removal of premolars in the treatment of Angle Class I defects;
- 4) can be used in mixed dentition;
- 5) has negative impact on periodontal condition.

The correct answer is:

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

**Nr 129.** Occlusal X-ray images are useful to determine:

- 1) position of unerupted teeth;
- 2) overall assessment of the stomatognathic system;
- 3) size of the midpalatal suture opening;
- 4) condition of the articular disc and soft tissues of the temporomandibular joint;
- 5) growth processes.

The correct answer is:

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

**Nr 130.** The principal value of Angle's classification of malocclusion is:

- A. possibility of reconstructing the position of the first permanent molars.
- B. assessment of the antero-posterior jaw relationship.
- C. indication for the differentiation of transverse defects.
- D. evaluation of disturbances in the intensity of crowding.
- E. spatial assessment of malocclusion.

**Nr 131.** The incisor position relative to the orbital plane is assessed on the basis of:

- A. value of the overjet.
- B. position of the dental arches midline.
- C. number of molars.
- D. assessment of the size of the incisors.
- E. antero-posterior canine contact.

**Nr 132.** The treatment of dental disorders such as teeth crowding depends on:

- |   |                    |
|---|--------------------|
| 1) age of the patient;                          | 4) skeletal class; |
| 2) activities and the size of the tongue;       | 5) facial profile. |
| 3) possibility of using a functional appliance; |                    |

The correct answer is:

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

**Nr 133.** The characteristic feature of mandibular prognathism is:

- A.** inhibition of the forward maxillary growth relative to the cranial base.
- B.** intraorally observed negative overbite gap in the width and height.
- C.** excessive vertical growth of the anterior part of the maxillary alveolar ridge.
- D.** elongated body of the mandible and enlarged mandibular angle.
- E.** disproportion in the width of the dental arches.

**Nr 134.** The biological norm by Orlik-Grzybowska is characterized by:

- A.** division of malocclusions in relation to the three spatial planes.
- B.** stability of morphological features.
- C.** overbite.
- D.** ANB angle.
- E.** supernumerary teeth.

**Nr 135.** In the cephalometric analysis by Steiner a SND angle value indicates:

- A.** reciprocal position of the jaws.
- B.** antero-posterior position of the mandible.
- C.** antero-posterior position of the maxilla.
- D.** skeletal Class III.
- E.** outline of the body of the mandible.

**Nr 136.** In the profile analysis the relation of the upper lip to the nose is assessed by:

- |  |  |
|--|--|
| <b>A.</b> evaluation of the chin bone structure.     | <b>D.</b> lip step by Korkhaus.                                  |
| <b>B.</b> evaluation of the length of the upper lip. | <b>E.</b> position of the lower lip in relation to the incisors. |
| <b>C.</b> naso-labial angle.                         |  |

**Nr 137.** The complete open bite is characterized by:

- A.** harmonious face.
- B.** positive functional test.
- C.** shortening of the anterior maxillary alveolar ridge.
- D.** limitation of the forward movements of the mandible.
- E.** increased angle of the maxillary bases.

**Nr 138.** A shared feature of deep bites is:

- |   |                             |
|---|-----------------------------|
| <b>A.</b> tooth structure disorder.                       | <b>D.</b> canine Class III. |
| <b>B.</b> lip prominence with smoothing nasolabial folds. | <b>E.</b> mouth breathing.  |
| <b>C.</b> increased overbite of incisors.                 |                             |

**Nr 139.** An increased SNA angle is a feature helpful in diagnosis of:

- A. partial distal occlusion.
- B. scissors bite.
- C. pseudodistocclusion.
- D. deviation of the mandible.
- E. morphological mandibular retrognathism.

**Nr 140.** The following is/are the source of mechanical forces in orthodontic appliances:

- A. orthodontic screws.
- B. construction bite.
- C. vestibular shields.
- D. orthodontic brackets.
- E. orthodontic miniscrews.

**Nr 141.** The lateral ligament plays a major role in the temporomandibular joint function. Which of the following features characterize this ligament?

- 1) the strongest part of ligament is in the anterior part of the joint;
- 2) the strongest part of ligament is in the lateral part of the joint;
- 3) strengthens the lateral side of the articular capsule;
- 4) protects the joint from excessive movement of condyles;
- 5) limits forward movement of the mandible;
- 6) protects the distal wall of the mandibular fossa that separates the joint from the ear canal.

The correct answer is:

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

**Nr 142.** Zinc oxide-eugenol impression material is used for:

- 1) relining impressions;
- 2) complex impressions for immediate dentures;
- 3) impressions in implantology;
- 4) mucodynamic impressions;
- 5) impressions for fixed dentures;
- 6) impressions for removable partial dentures with cast metal frameworks.

The correct answer is:

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

**Nr 143.** The relining impression should be made in the case of:

- 1) difficult anatomical conditions;
- 2) differences in the resilience of denture-bearing tissue surfaces;
- 3) postoperative scars or deformations;
- 4) severe bone loss after immediate denture application;
- 5) every year during check-ups for the lifetime of the denture.

The correct answer is:

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

**Nr 144.** While making a relining impression one should remember:

- 1) not to shorten denture borders;
- 2) to shorten denture borders around the entire outer circumference;
- 3) to remove uniformly ca. 1mm of acryl on the tissue-bearing surface of the denture;
- 4) to leave acrylic projections that will stabilize the vertical position of the denture;
- 5) to recommend that the patient should not eat or chew hard food for 8 hours after denture reline.

The correct answer is:

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

**Nr 145.** Which of the following impressions can be disinfected in a glutaraldehyde solution bath for 10 minutes?

- 1) silicone impressions;
- 2) alginate impressions for diagnostic casts;
- 3) alginate impressions for master casts;
- 4) zinc oxide-eugenol impressions;
- 5) polyether impressions.

The correct answer is:

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

**Nr 146.** To draw a gothic arch one can use:

- 1) Böttgier device;
- 2) Willis device;
- 3) Kleinrok's functiograph;
- 4) Facial arch;
- 5) Gerber pantograph.

The correct answer is:

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

**Nr 147.** The following are the indications for leaving removable dentures in the oral cavity for the day and night:

- 1) parafunctions;
- 2) temporomandibular joint arthropathy;
- 3) Costen syndrome;
- 4) neuromuscular disorders;
- 5) parodontopathy;
- 6) acoustic sounds in the temporomandibular joint;
- 7) overall tooth wear with vertical dimension loss.

The correct answer is:

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

**Nr 148.** Supple classification defines different types of the edentulous oral cavity relying on:

- 1) condition of the denture-bearing tissue surface;
- 2) age of the patient;
- 3) general health status of the patient;
- 4) stage of stomatitis prothetica.

The correct answer is:

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

**Nr 149.** The hardness of diamond on Mohs scale is:

- A. 1.                      B. 3.                      C. 5.                      D. 7.                      E. 10.

**Nr 150.** The multiple occlusal sound can indicate:

- A. increased vertical dimension.      D. temporomandibular joint arthropathy.  
B. decreased vertical dimension.      E. coordination disorder of the condyle head  
C. premature contacts.                      of the mandible and the articular discs.

**Nr 151.** The soft-tissue portion of the temporomandibular joint may be assessed by means of:

- A. tomography.                                      D. magnetic resonance imaging.  
B. computed tomography.                      E. all of the above.  
C. panoramic radiograph.

**Nr 152.** The group function occlusion during excentric mandibular movements in natural dentition is characterized by having:

- 1) canine rise in protrusion;
- 2) working contacts between canines and premolars;
- 3) working contacts between canines, premolars and molars;
- 4) no non-working side contacts;
- 5) working and non-working side contacts between canines and premolars.

The correct answer is:

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

**Nr 153.** The unilateral contraction of the inferior lateral pterygoid muscle:

- A. elevates the mandible.                      D. moves the mandible to the same side.  
B. protrudes the mandible.                      E. moves the condyle forward.  
C. moves the mandible to the opposite side.

**Nr 154.** The absolute indications for prosthodontic treatment include patients with:

- 1) missing lower molar;
- 2) pathological abrasion of teeth;
- 3) missing all second and third molars;
- 4) Capdepont's disease;
- 5) periodontopathies;
- 6) cleft palate;
- 7) functional disorders of stomatognathic system.

The correct answer is:

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

**Nr 155.** The protrusive movements of the mandible occur due to the bilateral contraction of the following muscles:

- 1) lateral pterygoids;
- 2) internal pterygoids;
- 3) internal fibres of masseters;
- 4) anterior fibres of the temporals;
- 5) mylohyoids.

The correct answer is:

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

**Nr 156.** A good retentive surface is characterized by:

- 1) 6 mm length;
- 2) 3 mm width;
- 3) 2 mm depth;
- 4) 8-15° deepening.

The correct answer is:

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

**Nr 157.** On examination of the patient with the edentulous maxilla, the prosthodontist has observed the presence of the palatal protuberance that extends to the posterior part of the palate. The prosthodontist should:

- 1) perform a surgical correction of the palatal protuberance prior to making the denture;
- 2) take a selectively relieving impression during denture fabrication;
- 3) relieve the denture base by adding foil layers to the model on the site of the protuberance;
- 4) reline the denture with elastic material.

The correct answer is:

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

**Nr 158.** Refractory masses should be characterized by:

- 1) stability at high temperature so as not to get disintegrated during alloy melting;
- 2) low mechanical resistance to easily free a cast element from the ring;
- 3) fine grains to obtain a smooth surface of the cast;
- 4) chemical reaction with the alloy to obtain a precise cast;
- 5) expansion coefficient that would compensate alloy shrinkage.

The correct answer is:

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

**Nr 159.** The following changes occur in the temporomandibular joint in edentulous patients:

- 1) flattening of the articular tubercle;
- 2) backward shifting of the articular cartilage;
- 3) downward and forward displacement of the articular heads;
- 4) degeneration of the articular surfaces;
- 5) atrophy of the articular cartilages.

The correct answer is:

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

**Nr 160.** The most important determinant of success in the immediate loading of an endo-osseous dental implant is:

- A.** implant surface.      **D.** patient's age.  
**B.** implant length.      **E.** avoidance of tobacco smoking.  
**C.** primary stability of the implant.

**Nr 161.** The mandible movement toward the median plane in the sagittal projection is:

- A.** mediotrusion. **B.** laterotrusion. **C.** disclusion. **D.** centric slide. **E.** none of the above.

**Nr 162.** The concave line joining the buccal and lingual cusp tips of the mandibular lateral teeth is:

- A. curve of Spee.
- B. curve of Capmer.
- C. compensation curve.
- D. line of Slavick.
- E. ala-tragus line.

**Nr 163.** Preliminary prosthodontic treatment undertaken before the fabrication of final prosthodontic appliances in partially edentulous patients includes:

- A. examination of the previous dentures taking into account their future usability.
- B. restorative treatment of the teeth.
- C. restorative treatment of periodontium and the oral mucosa.
- D. sanation of the oral cavity.
- E. surgical treatment correcting a denture bearing area of the mucosa and bone.

**Nr 164.** What is an average masticatory force in patients wearing full dentures?

- A. 0.5-1 kg.
- B. 1.0-1.5 kg.
- C. 2.0-25 kg.
- D. 30-35 kg.
- E. 40-45 kg.

**Nr 165.** Which of the following values applying to the mandibular movement analysis is true?

- A. range of jaw opening: 25-35 mm.
- B. range of jaw opening: 40-60 mm.
- C. range of lateral mandibular movements: 2-7 mm.
- D. range of lateral mandibular movements: 13-16 mm.
- E. protrusion: 3-5 mm.

**Nr 166.** The victim of an accident suffered extensive burns. They cover the front part of the torso and the left upper limb. What percentage of the body surface the burns cover?

- A. 18%.
- B. 27%.
- C. 36%.
- D. 45%.
- E. 54%.

**Nr 167.** Which of the following drugs **is not** used in the treatment of epileptic seizure?

- A. benzodiazepines (diazepam, clonazepam, midazolam).
- B. phenytoinum.
- C. pentobarbital.
- D. adrenaline.
- E. propofol.

**Nr 168.** Which of the following statements regarding stroke **is not** true?

- A. is haemorrhagic in 20% of cases.
- B. is a result of atherosclerosis and long-term hypertension.
- C. more frequently occurs in the presence of diabetes mellitus and acute myocardial infarction.
- D. more frequently occurs in the presence of atrial fibrillation.
- E. is ischemic in 20% of cases.

**Nr 169.** Which fractures are easily diagnosed, thus rarely overlooked on an X-ray?

- A. scaphoid fractures.
- B. tibial articular surface fractures.
- C. fractures of the fifth metatarsal.
- D. not displaced supracondylar fractures.
- E. Colles' fractures.

**Nr 170.** Which of the following statements concerning anaphylactic shock is **false**?

- A. application of epinephrine (adrenaline) as the first-line drug is the best treatment of anaphylactic shock.
- B. antihistamines and steroids should be considered a supplemental treatment.
- C. severe forms of anaphylactic reactions are a consequence of delayed treatment.
- D. because of frequent recurrences of anaphylactic reactions it is necessary to hospitalize the patient for the first 24 hours.
- E. only 1% of anaphylactic reactions is a consequence of Hymenoptera stings (honey bees, bumblebees, hornets and wasps).

**Nr 171.** Which of the following statements concerning cardiogenic shock is **false**?

- A. is most frequently caused by acute coronary syndromes.
- B. occurs mainly as a consequence of STEMI (ST elevation MI).
- C. is diagnosed in 7-10% patients with myocardial infarction (MI).
- D. in most cases cardiogenic shock develops on the 2nd day after MI onset.
- E. most frequently develops in anterior wall MI.

**Nr 172.** Which of the following symptoms confirm tracheal foreign body aspiration in children?

- A. cyanosis of the lips and mucosa.
- B. wheezing.
- C. suppression of the respiratory murmur.
- D. immobilization of the affected side of the chest.
- E. all of the above.

**Nr 173.** Which of the following is the most frequent cause of blocked airways?

- A. foreign body.
- B. trauma of the larynx and trachea.
- C. mandible fracture.
- D. tongue collapse.
- E. retention of secretion in airways.

**Nr 174.** Thrombolytic therapy is effective treatment of ischemic stroke. Please indicate the time period (therapeutic window) for this method:

- A. first 3 hours after stroke onset.
- B. first 6 hours after stroke onset.
- C. first 12 hours after stroke onset.
- D. first day after stroke onset.
- E. first two days after stroke onset.

**Nr 175.** In which of the following situations resuscitation in a patient with cardiac arrest should be undertaken?

- A. patient has extensive brain trauma indicating the uselessness of resuscitation.
- B. hypostasis (livor mortis) is present.
- C. post mortem rigidity is present.
- D. cardiac arrest is a result of chronic and irreversible wasting disease.
- E. patient has extensive chest trauma.

**Nr 176.** The license to practice dentistry in Poland is being granted and reviewed by:

- A. Minister of Health.
- B. Minister of Labour.
- C. regional chamber of physicians and dentists.
- D. medical university.
- E. voivodship (governor).

**Nr 177.** A dental experiment involving humans must be managed by:

- A. professor or associate professor.
- B. dentist being a specialist in a given field.
- C. pharmacist conducting research.
- D. dentist with sufficiently high professional and moral qualifications.
- E. scientist employed by a university.

**Nr 178.** A dentist **is not** allowed to sell:

- A. pharmaceuticals, medical materials, orthopaedic aids, or dental aids.
- B. dental aids only.
- C. orthopaedic aids only.
- D. medical materials under experiment.
- E. pharmaceuticals which are not officially registered.

**Nr 179.** When a dentist commits a serious mistake, or if the complications of treatment occur, he must:

- A. inform the patient.
- B. inform the patient and take an action to remedy the harmful effects.
- C. notify the patient's family or carers.
- D. simply notify the superior.
- E. not inform the patient.

**Nr 180.** The provisions of the Regulation of the Minister of Health on the types and scope of medical documentation and the way of processing it apply:

- A. only to hospitals.
- B. only to independent public health care institutions.
- C. only to dentists running their private practices (offices).
- D. only to dentists running their private practices exclusively in health care institutions.
- E. to all providers of health services.

**Nr 181.** A dentist is going to start private practice. He is allowed to run it, among others, as:

- 1) individual practice;
- 2) individual practice exclusively in a therapeutic entity (health care institution) based on a contract with this institution;
- 3) individual practice in the form of a civil partnership;
- 4) individual practice in the form of general partnership;
- 5) individual practice in the form of a limited liability company.

The correct answer is:

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

**Nr 182.** Tenure of the bodies of the chambers of physicians and dentists is:

**A.** 2 years. **B.** 4 years. **C.** 6 years. **D.** 10 years. **E.** indefinite, until revocation.

**Nr 183.** According to the Polish Code of Medical Ethics free treatment of widowed man whose wife was a medical doctor who died tragically is:

- A.** not acceptable because it violates competition rules.
- B.** allowed only if the physician has paid regular contributions to the medical chamber.
- C.** recommended only if the patient himself is a doctor.
- D.** good practice.
- E.** absolute duty.

**Nr 184.** According to the Polish Code of Medical Ethics research experiments involving mentally impaired persons:

- A.** are not acceptable in any case.
- B.** are admissible only if the risk is defined as small.
- C.** are permissible only if the studies are conducted to the benefit of those persons.
- D.** the regulations are the same as for all other persons.
- E.** Polish Code of Medical Ethics does not regulate this issue.

**Nr 185.** A dentist raised money for children's recreation center. For greater effectiveness he had used his influence on former and current patients. According to the Polish Code of Medical Ethics:

- A.** he acted rightly, because the goal is noble.
- B.** he is allowed to do so if donations do not exceed 3 times his daily salary.
- C.** he was allowed to do so only if it had been a hospice for adults.
- D.** he had the right to address only his current patients.
- E.** he should not do it.

**Nr 186.** An insured person working for money during the time of stated temporary incapacity to work:

- A.** receives sickness benefit in full amount.
- B.** receives 25% of sickness benefit.
- C.** receives 50% of sickness benefit.
- D.** receives 75% of sickness benefit.
- E.** loses the right to sickness benefit.

**Nr 187.** In accordance with the Act on cash benefits under social insurance in the event of sickness or maternity the Social Insurance Fund does not pay from the Sickness Fund the following:

- A.** sickness benefits.
- B.** rehabilitation benefits.
- C.** compensatory benefits.
- D.** family annuities.
- E.** care allowances.

**Nr 188.** Disability fund contributions in social insurance are paid by:

- A.** employee.
- B.** employer.
- C.** state budget.
- D.** employee and employer.
- E.** Guaranteed Employee Benefit Fund.

**Nr 189.** The sickness benefit from the Sickness Insurance Fund is paid for the period of temporary incapacity to work caused by illness (excluding tuberculosis) but **not longer** than:

- A. 100 days.      B. 130 days.      C. 182 days.      D. 200 days.      E. 215 days.

**Nr 190.** Sickness benefits and rehabilitation benefits from accident insurance are paid at the following amount calculated of the base of accident insurance contributions:

- A. 50%.      B. 60%.      C. 70%.      D. 80%.      E. 100%.

**Nr 191.** Care benefits are paid to insured persons holding the ruling of:

- A. degree of disability.      D. inability to service.  
B. partial incapacity for work.      E. loss of strength.  
C. inability to live independently.

**Nr 192.** In accordance with the Act on cash benefits under social insurance in the event of sickness and maternity, sickness benefits are not paid for the period of the first five days if temporary incapacity to work is caused by:

- A. infectious disease.      D. accident at work.  
B. tuberculosis.      E. mental aberration.  
C. alcohol abuse.

**Nr 193.** The risk factors of coronary heart disease include:

- 1) increased concentration of LDL cholesterol;      4) reduction of triglycerides;  
2) increased concentration of HDL cholesterol;      5) blood hypertension.  
3) diabetes mellitus;

The correct answer is:

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

**Nr 194.** Potential beneficial effects of regular physical activity in healthy adult people include:

- 1) reduction of fat tissue;  
2) slower heart rate;  
3) better frame of mind;  
4) higher concentration of LDL cholesterol and reduction of triglycerides;  
5) reducing the risk of heart attack by more than 70%.

The correct answer is:

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

**Nr 195.** Screening test recommended by national and international committees of experts for early detection of chronic diseases **do not** include:

- A. screening of cervical cancer (*Ca colli uteri*).  
B. screening for early detection of arterial hypertension.  
C. screening for early detection of diabetes.  
D. breast cancer screening.  
E. screening in order to detect cancers of the oesophagus and liver.

**Nr 196.** Which statements concerning mortality reasons in Poland are **false**?

- 1) heart diseases are the main reason of all-cause mortality in Poland;
- 2) cancers are the main reason of all-cause mortality in Poland;
- 3) mortality of newborns and babies increased dramatically in Poland in the last 10 years;
- 4) traffic accidents and injuries are the main reasons of mortality in children and youth;
- 5) all-cause mortality indices in Poland are among the lowest in the European Union countries.

The correct answer is:

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

**Nr 197.** Outpatient secondary health care is provided for an insured person on the basis of a referral from the primary care physician (family doctor). Such a referral is not required if the advice is taken of a specialist in the field of:

- 1) gastrology;
- 2) gynecology;
- 3) laryngology;
- 4) dentistry;
- 5) neurology;
- 6) oncology;
- 7) cardiology.

The correct answer is:

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

**Nr 198.** The basic public health functions include:

- A.** monitoring the health and determining the health needs of the population.
- B.** protection against the threads to life environment.
- C.** promotion of healthy lifestyles and health education.
- D.** cooperation in establishing priorities for health policy and education of public health staff.
- E.** all of the above.

**Nr 199.** In accordance with the Law on health care financed from public resources, the activities for health maintenance, disease prevention and early detection of diseases include:

- A.** promotion of healthy lifestyles, especially by encouraging people to take individual responsibility for their health.
- B.** carrying out preventive actions which include health promotion and dental prophylaxis for children and young people under 19 years of age.
- C.** carrying out preventive examinations of pregnant women including dental prophylaxis.
- D.** carrying out protective vaccination.
- E.** all of the above.

**Nr 200.** Demographic transformation, which is lengthening the average life expectancy of societies, is a key challenge to public health. This process is conditioned by:

- A.** socio-economic development of societies.
- B.** positive changes in living conditions.
- C.** development and achievements of the biomedical sciences that provide knowledge about the mechanism of formation and progression of disease.
- D.** availability of financial resources in the health care system.
- E.** all of the above.

**Thank you!**