

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

Question nr 1

Indicate the true sentence on the preparation of class III cavity in deciduous teeth:

- A.** access should always be gained from the labial surface of the crown.
- B.** other caries lesions should not be included in the preparation.
- C.** access should always be gained from the palatal surface of the crown.
- D.** never demands retention cuts.
- E.** is the same as in permanent teeth.

Question nr 2

Indicate the true statements concerning chemo-mechanical caries removal (CMCR method):

- 1) is based on softening the caries dentine with a 0.5% solution of sodium hypochlorite of pH = 11 and its removal with special non-cutting edge tools
- 2) is based on softening the caries dentine with a 1% solution of sodium hypochlorite of pH = 8 and its mechanical removal with hand instruments;
- 3) for the removal of caries one can use proteolytic enzyme - papain and excavator or blunt curette;
- 4) for the removal of caries one can use proteolytic enzyme - papain and non-cutting edge tools
- 5) gel in the Carisolv set contains: leucine, lysine, glutamic acid, erythrosine, sodium chloride and sodium hydroxide.

The correct answer is:

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

E. 2,4.

### Question nr 3

“Safe for teeth” foods with a low potential to induce caries in teeth are:

- A. ice-creams, milk cocktails, fruit yoghurts.
- B. candied figs, sugar syrups, jams, juices and nectars.
- C. sugar, honey, soft drinks.
- D. popcorn, toasts, biscuits, pretzel, pizza, bagel.
- E. sweets, caramel candy, syrups.

### Question nr 4

Which of the following is a clinical index for caries in permanent teeth during the next 5 years?

- A. presence of >1 surface with caries in the second primary molars in 5-year-olds.
- B. presence of >1 surface with caries in the second primary molars in 6-year-olds.
- C. presence of >2 surfaces with caries in the second primary molars in 5-year-olds.
- D. presence of >2 surfaces with caries in the second primary molars in 6-year-olds.
- E. presence of >2 surfaces with caries in the second primary molars in 7-year-olds.

### Question nr 5

Which of the systemic diseases and developmental abnormalities of the teeth may promote inflammation of the pulp?

- 1) osteogenesis imperfecta;
- 2) Down syndrome;
- 3) sickle cell anemia;
- 4) enamel hypoplasia;
- 5) dens invaginatus.

The correct answer is:

**A.** 1,2,3.

**B.** 1,3,4.

**C.** 1,4,5.

**D.** 2,3,5.

**E.** 3,4,5.

Question nr **6**

Indicate the true sentence on dens evaginatus:

**A.** it has additional tubercles usually projecting from the buccal surface or palatal surface of the crown created of enamel or enamel and dentine, sometimes with the pulp inside.

**B.** in incisor teeth the tubercle is called Talon cusp or Leong tooth.

**C.** on the palatal surface of the first maxillary molar (rarely second or third permanent molars) the tubercle is called Carabelli cusp.

**D.** it has additional tubercles usually on the palatal surface of the crown created of enamel or enamel with dentine, never with the pulp inside.

**E.** in permanent teeth with incomplete root formation, an abrasion or fracture of the tubercle is the indication for sealing or restoration with composite material.

Question nr **7**

Indicate the true statement:

**A.** bacteriological tests of resting saliva allow the quantitative estimation of *Streptococcus mutans* and *Lactobacillus acidophilus* bacteria.

**B.** use of CRT Bacteria test in stimulated saliva allows to estimate the number of colonies of both *Streptococcus mutans* and *Lactobacillus acidophilus* at the same time.

**C.** high risk of caries is indicated by CFU/ml of saliva not lower than  $10^6$ .

**D.** number of *Streptococcus mutans* reflects the intake of carbohydrates by the patient in the last two weeks.

**E.** incorrect viscosity, consistency and pH of saliva when its volume and

buffer capacity are normal is an effect of salivary gland disorder.

#### Question nr 8

Indicate the true statement concerning sequelae of a trauma to primary dentition:

- A.** developmental defect of permanent teeth after a trauma to milk teeth are present in 80-96% of cases.
- B.** hypoplasia of the enamel of central incisors can be a consequence of an injury to milk teeth at the age of 2-7 years.
- C.** total or partial inhibition of root development is a frequent complication after the intrusion of a milk incisor at the age of 2-3 years.
- D.** 'sickle incisor' is a kind of malformation present after a trauma to the central lower incisor.
- E.** dilacerations of the crown of a permanent tooth is a sequela of fractures embracing enamel and dentine of the milk tooth crown.

#### Question nr 10

Indicate the true sentence on treatment of a tooth injury, diagnosed as concussion of a milk tooth - with increased mobility but no displacement and no injury to surrounding tissues:

- A.** injury needs no treatment, only regular checkups are required.
- B.** treatment will depend on the degree of tooth mobility and the state of the root.
- C.** treatment will depend on occlusion.
- D.** treatment will depend on the state of surrounding tissues.
- E.** treatment will depend on the age of the child and its cooperation with the dentist.

#### Question nr 11

Indicate the true statements concerning the pulp and its diseases:

- 1) enamel hypoplasia favors the occurrence of pulp diseases;
- 2) factors connected with pulp inflammation are: low mineralization of enamel and dentine, and a straight course of dentinal tubules;
- 3) inherited hypophosphatemia favors the occurrence of pulp diseases;

4) stimulation of dentine can lead to the creation of a layer of dental tubules without the odontoblast processes;

5) tertiary dentine is also called sclerotic dentine.

The correct answer is:

**A.** all the above.

**B.** 1,2,3,4.

**C.** 1,2,3.

**D.** 2,3,4.

**E.** 4,5.

#### Question nr 12

The first premolar in the maxilla usually erupts:

**A.** between 8 and 9 years of age.

**B.** between 9 and 10 years of age.

**C.** between 10 and 11 years of age.

**D.** between 11 and 12 years of age.

**E.** around 13 years of age.

#### Question nr 13

During the examination of an 8-year-old patient the dentist found a large carious lesion of class I in tooth 16, and in it the presence of an extensive tissue with a red and smooth surface, bleeding and painless on probing. The cause of this condition may be:

1) polyp of gum;

2) polyp of pulp;

3) pulp necrosis;

4) proliferative pulpitis;

5) chronic granulomatous pulpitis.

The correct answer is:

**A.** only 1.

**B.** 1,2,4.

**C.** 1,2,5.

**D.** 1,3.

**E.** 2,4,5.

**Question nr 14**

A child aged 10, fell off the bicycle two days ago. The child complains about teeth 11 and 12 sensitivity while biting. During a clinic investigation, intact tooth crowns were found. No reaction to cold or electrical stimuli can be observed. In this case treatment will be based on:

- 1) periodic clinical control of pulp vitality and a recommendation to eat soft food.
- 2) periodic clinical control of pulp vitality and splinting the teeth with a flexible splint for 2 weeks.
- 3) taking the teeth out of occlusion and periodic control of pulp vitality for a year.
- 4) partial pulpotomy.
- 5) root canal treatment because of the symptoms of pulp necrosis.

The correct answer is:

**A.** 1,5.

**B.** 2,4.

**C.** 3,5.

**D.** 2,3,5.

**E.** 1,3,5.

**Question nr 16**

Indicate the period of emotional development of a child, that is characterized by child's huge emotional impulsiveness and lability of feelings that cannot be hidden or suppressed:

**A.** infantile period (up to 12 months).

**B.** toddler period (1-3 years of age).

**C.** preschool period (3-7 years of age).

**D.** early school period (7-12 years of age).

**E.** adolescence period (12-18 years of age).

Question nr 17

Indicate **the false** statement concerning tetracycline discolorations:

- A.** they are caused by systemic intake of tetracycline antibiotics by the mother during the period of breast feeding.
- B.** right after the tooth eruption they are less visible, but with time the teeth darken when exposed to light.
- C.** in permanent dentition they are most visible in incisors and first permanent molars.
- D.** in severe form, they may be accompanied by enamel hypoplasia.
- E.** they are caused by systemic intake of tetracycline antibiotics by a child up to the age of 12 years.

Question nr 18

After direct pulp capping with the use of calcium hydroxide paste, calcified dentinal bridge can be seen on radiograph after:

- A.** 2-7 days.
- B.** 1-2 weeks.
- C.** 3-12 weeks.
- D.** 3-5 months.
- E.** 6-8 months.

Question nr 19

Indicate the factors which affect the risk for the development of the pulp necrosis after traumatic injury:

- 1) compression of the pulp in the apical area of the root;
- 2) precision in reposition of the luxated tooth;
- 3) exposure of the dentine;
- 4) stage of the root development;
- 5) size of the root apex.

The correct answer is:

- A.** 1,2.
- B.** 1,2,4.

**C.** 1,2,5.

**D.** 1,2,4,5.

**E.** all the above.

#### Question nr 20

The parent comes to the dental office with a 3-year-old child after a dental trauma. The tooth is displaced (retruded); during tapping a metallic-like (ankylotic) sound can be heard, no mobility and altered occlusion can be observed. The tooth should be cleaned with a spray of water, saline or chlorhexidine and:

**A.** the tooth should be left for spontaneous self-eruption.

**B.** local anesthesia should be applied and the tooth should be repositioned by finger pressing.

**C.** local anesthesia should be applied and the tooth should be extracted.

**D.** the tooth should be ground.

**E.** local anesthesia should be applied and the tooth should be repositioned by finger pressing and splinted.

#### Question nr 21

Dentes natales:

**A.** are the teeth present in the mouth at the moment of the birth.

**B.** are more frequent among boys than girls.

**C.** are always prematurely erupting milk teeth.

**D.** A and B are true.

**E.** A and C are true.

#### Question nr 22

Indicate the true statement concerning the safety of use of professional fluoride prophylactics:

**A.** level of fluoride in plasma after the application of fluoride varnish is similar



to the one after brushing the teeth with fluoride toothpaste or after the intake of 1 mg fluoride tablet.

**B.** the lowest level of fluoride in plasma was recorded after the topical fluoride application with APF gel.

**C.** level of fluoride in plasma after using fluoride gel is similar to the one after brushing the teeth with fluoride toothpaste or the intake of 1 mg fluoride tablet.

**D.** level of fluoride in plasma after the application of fluoride varnish is similar to the one after brushing the teeth with fluoride toothpaste or the intake of 0.5 mg fluoride tablet.

**E.** the highest level of fluoride in plasma was recorded after the topical fluoride varnish application.

### Question nr 23

Which of the following is usually required to see an enamel infraction (crack) without a loss of hard tissues of the tooth crown and without crossing the enamel-dentin junction by the fracture line?

**A.** transillumination.

**B.** reflected light.

**C.** items measuring the electrical conductivity.

**D.** A and C are true.

**E.** A and B are true.

### Question nr 24

In a 12-year-old boy a lateral luxation of the upper permanent incisor with palatal displacement of the crown was found. No increased mobility of the tooth was found; however, there is a changed, ankyloses-like sound during tapping the tooth and bleeding from the periodontal ligament. No fracture of the root was found in the radiograph. The most adequate proceeding in this case is:

1) reposition of the tooth with digital pressure on the root apex in the palatal direction;

2) reposition of the tooth with digital pressure on the root apex in the incisal edge direction;

3) leaving the tooth for re-eruption;

- 4) splinting the teeth for 4 weeks;
- 5) splinting the teeth for 2 weeks.

The correct answers is:

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

#### Question nr 25

In a fluoride prophylaxis the favored source of fluoride in light of costs, effectiveness and population is:

- A.** fluoride toothpastes.
- B.** drinking fluoridated community water.
- C.** drinking mineral water with fluoride.
- D.** use of fluoride salt.
- E.** professionally applied fluoride products.

#### Question nr 26

Indicate the most adequate proceeding in the case of accidental intake of fluoride at a dose of 9 mg/kg of body weight by a child:

- A.** calcium should be administered orally and the patient should be monitored for the next 4 hours.
- B.** calcium gluconate should be administered intravenously and the patient should be monitored for the next 4 hours.
- C.** gastric lavage should be administered, than calcium orally and the patient should be monitored for the next 4 hours.
- D.** patient should be referred to hospital, the vital functions should be supported, gastric lavage should be administered, than calcium should be administered orally and observation.

**E.** patient should be referred to hospital, the vital functions should be supported, activated charcoal administered than gastric lavage, calcium gluconate intravenously and observation.

#### Question nr 27

Which of the following data from the CRA questionnaire filled by a nurse in for 3-year-old boy with nephrotic syndrome speak in favor of a low risk of caries?

- 1) the presence of bacteriological biofilm;
- 2) lack of restorations with secondary caries;
- 3) daily intake of less than 3 sugar snacks between main meals;
- 4) not increased level of *Streptococcus mutans*;
- 5) lack of active caries lesions in the mother.

The correct answer is:

**A.** all the above.

**B.** 2,3,4,5.

**C.** 2,3,5.

**D.** 2,3.

**E.** none of above.

#### Question nr 28

Indicate the true statements on high-viscosity glass-ionomer cements:

- 1) they are recommended for the atraumatic restorative technique (ART);
- 2) they are slow setting cements;
- 3) they are recommended for the use in primary molars in the class I lesions (acc. to Black);
- 4) they have high wear resistance and compression strength in comparison with other glass-ionomers;
- 5) they are unique triple-cure cements.

The correct answer is:

**A.** 1,4,5.

**B.** 1,3,4.

**C.** 3,4.

**D.** 4,5.

**E.** 2,3,4.

Question nr **29**

The tissue scar on the surface and in the sub-surface layer of a carious lesion appears after the use of:

- A.** infiltration with methacrylate resin (ICON).
- B.** low level fluoride products.
- C.** high level fluoride products.
- D.** casein-phosphopeptide - amorphous calcium phosphate crèmes (CPP-ACP).
- E.** amorphous calcium phosphate crèmes (ACP).

Question nr **30**

Indicate proper treatment in the case of the root fracture of a milk tooth:

- 1) no treatment needed if the fractured fragment is not dislocated;
- 2) if the fractured coronal fragment is dislocated - the reposition with digital pressure and splinting;
- 3) manual reposition of the dislocated coronal fragment;
- 4) reposition of the dislocated coronal fragment with forceps, elastic splinting for 2-4 weeks;
- 5) extraction of the dislocated coronal fragment and leaving the apical fragment to resorb.

The correct answer is:

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

Question nr **31**

Which of the following indicate a high risk of dental caries in a 5-year-old child according to the CRA system, dedicated for use by dental personnel?

- 1) enamel defects;
- 2) dmft>1;
- 3) presence of dental plaque;

- 4) need for special pediatric care;
- 5) origin from immigrant family.

The correct answer is:

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

#### Question nr 32

The percentage of external resorption after avulsed permanent tooth replantation is the smallest in the case of:

- A.** removal of periodontal ligaments from the root of a replanted tooth.
- B.** keeping the tooth in a solution of antibiotic for 30 minutes.
- C.** replantation of the tooth within 30 minutes after the injury.
- D.** keeping the tooth for 2 hours in a special medium for transporting.
- E.** application of the rigid splint.

#### Question nr 33

The general contraindications to the root canal therapy of a milk tooth include:

- A.** congenital immunodeficiency.
- B.** malignancy undergoing chemo- or radiotherapy.
- C.** hypodontia (lack of permanent tooth buds).
- D.** non-restorable tooth.
- E.** A and B are true.

#### Question nr 34

Indicate the true statement concerning resin infiltration of caries technique:

**A.** it is effective in remineralization and prevention of further demineralization of white spots.

**B.** for etching white spots, the mixture of metasilicic and hydrochloric acids is used.

**C.** infiltration is indicated in the case of cariogenic changes categorized radiologically as D1 and D2.

**D.** depth of cariogenic lesions does not influence the degree of resin infiltration.

**E.** for etching white spots, the mixture of metasilicic and ortophosphoric acids is used.

#### Question nr 35

In the case of the intrusion of a permanent tooth:

- 1) if the crown is visible and the root apex is wide open (>2mm) , the tooth can be left for self-re-eruption;
- 2) immediate reposition is indicated in permanent teeth with completed root development;
- 3) in intruded immature permanent teeth, left for re-eruption, ankyloses occurs very rarely;
- 4) the reposition does not decrease the necrosis of periodontal ligaments;
- 5) in almost all such cases the extirpation of pulp is needed.

The correct answer is:

**A.** 3,4,5.

**B.** 1,2,3.

**C.** 1,2,5.

**D.** 2,3,4.

**E.** 1,3,4.

#### Question nr 36

Primary herpetic gingivostomatitis is characterized by:

- 1) redness and oedema of the gingiva;
- 2) clusters of shallow ulcers;
- 3) intraepithelial vesicles that rapidly rupture to form painful ulcers;
- 4) vesicular-vesicle eruption;
- 5) healing with no scars.

The correct answer is:

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

**Question nr 37**

Indicate the true statements about so-called "Rushton teeth":

- 1) most often they appear as supernumerary teeth;
- 2) shape and size of their crowns are abnormal;
- 3) it is congenital mesodermal tooth hypoplasia;
- 4) there is no enamel on their labial surface;
- 5) thickness of enamel is normal while the layer of dentine is thinner and the pulp chamber is huge;
- 6) the roots are underdeveloped.

The correct answer is:

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

**Question nr 38**

Indicate the proper sequence of the steps of pulpectomy in milk teeth:

- 1) local analgesia and placing the rubber dam;
- 2) root canal obturation with resorbable paste;
- 3) restoration of the crown, providing marginal seal;
- 4) total removal of carious tissues;
- 5) regular radiographic and clinical follow-up;
- 6) chemo-mechanical root canal preparation.

The correct answer is:

- A.** 1,2,3,4,5,6.

**B.** 5,1,3,4,2,6.

**C.** 1,4,6,2,3,5.

**D.** 5,1,4,6,2,3.

**E.** 1,4,3,6,2,5.

**Question nr 39**

The main symptom of vitamin D-resistant rickets in dentition in children is:

**A.** microdontic teeth.

**B.** diminution of tooth pulp chambers.

**C.** enamel hypoplasia.

**D.** reduction of the root length.

**E.** taurodontic teeth.

**Question nr 40**

Indicate the true statements on the usage of mouth protectors (mouth guards):

1) they disperse the energy of the impact;

2) stock mouth protectors, available in three standard sizes, can effectively protect against tooth injuries;

3) "boil and bite" mouth protectors are as effective as custom-fitted ones in the prevention of dental injuries;

4) custom-fitted protectors provide the best protection against dental injuries.

The correct answer is:

**A.** only 1.

**B.** 1,2.

**C.** 1,3.

**D.** 1,4.

**E.** only 4.

**Question nr 41**

Indicate the expected result of the replantation of an avulsed tooth with a



closed apex with extraoral dry time exceeding 60 minutes:

- A.** preserved vitality of periodontal ligaments.
- B.** ankylosis.
- C.** root resorption.
- D.** pulp revascularization.
- E.** B and C are correct.

**Question nr 42**

Dentinal dysplasia (DD) is a disease inherited with an autosomal dominant trait. In which type of DD, the outline of the pulp chamber is significantly reduced and it has a shape of a horizontally arranged crescent and the tooth roots are short?

- A.** root type I, subtype A.
- B.** root type I, subtype B.
- C.** root type I, subtype C.
- D.** root type I, subtype D.
- E.** crown type II.

**Question nr 43**

A loss of tooth structure occurring in children with gastro-oesophageal reflux is called:

- A.** erosion.
- B.** abrasion.
- C.** attrition.
- D.** caries.
- E.** cervical lesion.

**Question nr 44**

To detect an approximal caries, apart from the traditional visual and tactile methods, one can use:

- A. intraoral camera.
- B. transillumination method (diaphanoscopy).
- C. bitewing radiographs.
- D. A, C are true.
- E. A, B and C are true.

Question nr **45**

Indicate the true statements concerning fissure sealing:

- 1) presence of caries on the approximal surface of a tooth is a temporary contraindication;
- 2) low and moderate risk of caries is a contraindication;
- 3) sealing the fissure up to 6 months after tooth eruption is the most effective;
- 4) fissure sealing procedure can be performed at any age;
- 5) if it is difficult to obtain dryness, composite sealing is recommended.

The correct answer is:

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

Question nr **46**

Indicate the true statement on dentifrices with chlorhexidine for home oral care:

- A. should be used no longer than 2 weeks.
- B. in special cases they can be used up to 30 days.
- C. can induce discoloration of teeth, tongue and restorations.
- D. can induce a desquamation of oral epithelium.
- E. all of above are true.

Question nr 47

Taurodontism means:

- A.** genetic developmental disorder of molar teeth that is characterized by vertical enlargement of the pulp chamber on an x-ray, at the expense of the roots with no constriction around the neck of the tooth.
- B.** developmental disorder that appears with the root furcation placed high and close to the transition into the crown.
- C.** developmental disorder connected with the changed number of roots.
- D.** disorder consisting in the intrusion of hard tissues (enamel and dentine) into the pulp chamber.
- E.** none of the above.

Question nr 48

From what age a single 0.25 ml dose of 5% NaF varnish can be used?

- A.** from birth.
- B.** from the age of 1.
- C.** in the period of mixed dentition.
- D.** only in permanent dentition.
- E.** depending on the child's ability to spit saliva.

Question nr 49

Which of the environmental factors are included in the assessment of a caries risk?

- 1) socioeconomic variables;
- 2) level of fluoride in drinking water;
- 3) oral hygiene;
- 4) concomitant medical conditions;
- 5) susceptibility to caries of the patient's social group.

The correct answer is:

- A.** 1,2.
- B.** 1,2,3.

**C.** 1,4,5.

**D.** 1,2,5.

**E.** all the above.

**Question nr 50**

Taurodontism may be present in:

- 1) vitamin D-resistant rickets;
- 2) dens invaginatus;
- 3) hypophosphatasia;
- 4) some cases of dentinogenesis imperfecta;
- 5) amelogenesis imperfecta;
- 6) molar-incisor hypomineralization.

The correct answer is:

**A.** 1,2,3.

**B.** 2,3,4.

**C.** 3,4,5,6.

**D.** 1,3,4.

**E.** 1,3,4,6.

**Question nr 51**

The most frequent complication occurring after avulsed tooth replantation is:

**A.** root canal obliteration.

**B.** inhibition of root process formation.

**C.** bone necrosis.

**D.** root resorption.

**E.** crown discoloration.

**Question nr 52**

The immobilizing of deciduous teeth is recommended:

**A.** only in an alveolar bone fracture.

- B.** in a root fracture and alveolar bone fracture.
- C.** in a crown-root fracture with exposure of pulp and an alveolar bone fracture.
- D.** in a complicated crown fracture and an alveolar bone fracture.
- E.** in lateral luxation and an alveolar bone fracture.

Question nr **53**

Indicate **the false** statement concerning the caries resin infiltration technique:

- A.** is an invasive technique of treatment of deep caries lesions with a use of ICON set.
- B.** is based on the concept of filling the porosity of enamel with a resin.
- C.** can prevent the progress of caries process.
- D.** is indicated in the treatment of deep caries lesions.
- E.** A and D are false statements.

Question nr **54**

During cavity preparation in deciduous tooth, one should take into account a caries lesion's size and:

- 1) crown's size;
- 2) crown's shape;
- 3) morphology of the pulp chamber;
- 4) enamel prisms' direction;
- 5) presence of an enamel cingulum.

The correct answer is:

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

Question nr **55**

For sealing pulp stumps in milk teeth after vital pulpotomy it is **not recommended** to use:

- A. carboxylate cement.
- B. zinc-oxide with eugenol paste.
- C. MTA.
- D. calcium hydroxide paste.
- E. A and D are true.

Question nr **56**

Indicate the characteristic features of caries in deciduous teeth:

- 1) rapid development from initial to further stadium of caries, constant and rapid development of disease;
- 2) in short time pulp complications may occur;
- 3) there are fewer caries lesions in lower molars than in upper ones;
- 4) caries lesions most often occur symmetrically on both sides of the arches;
- 5) in first molar tooth, caries lesions are most often observed on the mesial aproximal side.

The correct answer is:

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

Question nr **57**

Which of the following sentences on the etiology of fluorosis is correct?

- A. fluorosis can result from using fluoridated tablets by mother during pregnancy.
- B. fluorosis can result from using fluoridated tooth paste during the puberty period.
- C. the only cause of fluorosis is an increased level of fluoride in drinking

water.

**D.** occurrence of fluorosis is connected with a total dose of fluoride derived from various sources during odontogenesis.

**E.** calcium and magnesium in food increase the absorption of fluoride.

Question nr **58**

Specific changes in the oral cavity of children suffering from Crohn disease include:

- 1) polypoid tags of the mucosa;
- 2) diffuse swelling of the lips and cheeks;
- 3) cobblestone appearance of the buccal mucosa;
- 4) aphtes;
- 5) tongue inflammation.

The correct answer is:

**A.** 1,2,3.

**B.** 2,4.

**C.** 2,3,5.

**D.** 2,3,4.

**E.** all the above.

Question nr **59**

The diagnosis of congenital syphilis is based on:

**A.** deafness, developmental disturbances of incisal edges of dental crowns.

**B.** deafness, interstitial keratitis, developmental disturbances of incisal edges of dental crowns.

**C.** developmental disturbances of incisal edges of dental crowns.

**D.** deafness, developmental disturbances of incisal edges of dental crowns and molar teeth.

**E.** interstitial keratitis, developmental disturbances of molar teeth.

Question nr **60**

Indicate the true statements concerning caries risk:

- 1) if the risk of caries in a child of 3 years is high it will be equally high at 6 years;
- 2) time of the colonization of a child's oral cavity with bacteria does not affect the risk of ECC;
- 3) the younger the child with caries, the higher the risk of caries;
- 4) age of a child with an onset of caries does not affect the level of caries risk;
- 5) composite and compomer materials may only be used in children with moderate caries risk.

The correct answer is:

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

#### Question nr 61

A temporary contraindication to the sealing of pits and other anatomical fissures of the teeth is:

- A.** presence of caries on the approximal surfaces of a tooth.
- B.** patient's age.
- C.** time that passed since the tooth eruption, shorter than 6 months.
- D.** high risk of caries.
- E.** sound pits and fissures - caries free.

#### Question nr 62

The intrusion of a permanent tooth into the alveolar socket is a tooth injury classified by Ellis classification as:

- A.** Class IV.
- B.** Class V.
- C.** Class VI.



D. Class VII.

E. Class VIII.

Question nr **63**

Indicate true sentences on delayed tooth eruption:

- 1) delayed eruption of deciduous teeth does not demand treatment;
- 2) fluctuation of deciduous tooth eruption time is  $\pm 3$  months;
- 3) fluctuation of permanent tooth eruption time is  $\pm 1$  year;
- 4) lack of eruption of a contralateral tooth for 1 year since the eruption of a tooth on the other side needs further investigation;
- 5) tooth eruption is always correlated with somatic development.

The correct answer is:

A. 1,2,3.

B. 1,3.

C. 1,3,5.

D. 2,3,5.

E. 2,3,4.

Question nr **64**

An indication for milk tooth extraction **is not**:

- 1) neonatal tooth causing Riga-Fedé ulcer;
- 2) delayed eruption of permanent successors;
- 3) tooth with pulp necrosis discovered during radiotherapy in the head region;
- 4) tooth located in a tumor;
- 5) presence of a dentigerous cyst.

The correct answer is:

A. 3,4.

B. 2,4.

C. 1,4,5.

D. 1,3,5.

E. 2,3,5.

Question nr **65**

Indicate true sentences on the treatment of a milk tooth intruded into the alveolar bone:

- 1) conservative treatment can be introduced if the apex is displaced towards the oral cavity;
- 2) if the inflammation of surrounding tissues persists, the tooth should be extracted;
- 3) antibiotic should always be ordered;
- 4) in the first stage, oral cavity rinsing with disinfectants or disinfectants on injured soft tissues should be applied.

The correct answer is:

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

#### Question nr 66

Recommended methods of the treatment of initial caries **do not** include:

- A. sealing of pits and fissures.
- B. infiltrating into caries.
- C. remineralization.
- D. layering technique of the composite restoration.
- E. use of fluoride releasing materials.

#### Question nr 67

Which of the following sentences concerning positive reinforcement are **false**?

- 1) is based on a successive verbal approximation to desired behavior;
- 2) is based on a promise of reward before treatment is started;
- 3) is based on a reward in response to desired behavior;
- 4) can be used in all children;
- 5) can be used in children above the age of 6.

The correct answer is:

**A.** 1,3,5.

**B.** 2,5.

**C.** 3,5.

**D.** 1,2,5.

**E.** 2,3,4.

**Question nr 68**

Silver Diamin Flouride (SDF) is a compound that can be used as:

**A.** ingredient of the second generation of fluoride varnish.

**B.** infiltrating resin in the caries infiltration method.

**C.** gel for the removal of caries by the chemomechanical method.

**D.** medication for the impregnation of tooth tissues.

**E.** ingredient of plaque disclosing tablets.

**Question nr 69**

Find the true sentences on the impregnation method:

1) it is used in numerous, deep caries lesions in primary molars in order to reduce a risk of pulp exposure;

2) it is used in the case of flat and extensive lesions, expanding to enamel and an outer layer of dentine;

3) it is the basic method of treatment of caries in milk incisors.

The correct answer is:

**A.** only 1.

**B.** only 2.

**C.** 1,2.

**D.** 1,3.

**E.** 2,3.

**Question nr 70**

Indicate the true statements concerning iodine povidone:

- 1) it is used in a 5% solution for the treatment and prevention of early childhood caries;
  - 2) it is used in a 10% solution for the treatment and prevention of early childhood caries;
  - 3) it is recommended in children with the high risk of caries;
  - 4) it is especially recommended in children with the low risk of caries;
  - 5) iodine povidone has a sour taste, but it does not discolor tooth tissues.
- The correct answer is:

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

**Question nr 71**

Temporary restoration made of pure zinc oxide powder mixed with eugenol should be replaced with permanent restoration after the period of:

- A.** 1 month.
- B.** 2 months.
- C.** 3 months.
- D.** 4 months.
- E.** 6 months.

**Question nr 72**

A significant oral symptom of lymphoblastic leukemia in children is a tendency to:

- A.** dental caries.
- B.** overgrowth of the gingiva.
- C.** bone atrophy.
- D.** gingival bleeding.

E. aphtes.

Question nr 73

Antibiotic therapy is indicated in a patient after trauma in the case of:

- 1) soft tissue injuries caused by animal or human bites;
- 2) any injuries of soft tissues;
- 3) intrusion of a permanent tooth into the alveolar bone;
- 4) replantation of an avulsed tooth;
- 5) extensive damage of the lip or cheek.

The correct answer is:

A. 1,3,4,5.

B. 2,3,4.

C. 1,2,5.

D. 1,4,5.

E. 4,5.

Question nr 74

In the case of planning a glass-ionomer restoration in a small cavity, class II by Black in a milk tooth:

- A. preparation should extend occlusally and include sound fissures.
- B. outline of the preparation should correspond strictly with the size of caries.
- C. retention should be increased by preparation of the so called "dove tail" on the occlusal surface.
- D. margins of preparation should be beveled in order to increase adhesion to enamel.
- E. B and C are correct.

Question nr 75

Radiological examination of immature teeth after root canal therapy should be repeated:

- A. after 3, 6, 12 months, and then annually for 4 years.

- B.** after 6, 12, 18, 24 months.
- C.** after 12 and 24 months, then once every 5 years.
- D.** once a year for 4 years.
- E.** every 3 months for one year.

**Question nr 76**

Concussion is identified as:

- A.** damage of dental ligament without increased mobility and dislocation of a tooth.
- B.** damage of dental ligament with increased mobility of a tooth but without dislocation.
- C.** dislocation of a tooth in direction different than the axial one.
- D.** partial, vertical dislocation of a tooth.
- E.** dislocation of a tooth deep into the alveolar bone.

**Question nr 77**

Indicate the correct sequence of apexification procedure with a use of calcium hydroxide paste  $\text{Ca}(\text{OH})_2$ , during the first dental visit:

- 1) making an x-ray;
- 2) placing a rubber dam;
- 3) removal of necrotic pulp;
- 4) making an access to the pulp chamber and canals in the roots;
- 5) drying the root canal;
- 6) measuring the working length by taking an x-ray of a tooth with a file inside the canal;
- 7) shaping the root canal and rinsing the canal with disinfectants;
- 8) placing calcium hydroxide paste  $(\text{CaOH})_2$  in the canal;
- 9) tight sealing of the tooth crown.

The correct answer is:

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

E. 1,2,4,3,5,6,7,8,9.

#### Question nr 78

In a 3-year-old child, the intrusion of teeth 51 and 52 were observed, the crowns are shortened by about 1/3 of their length. The occlusal x-ray shows the dislocation of the root apices in the labial direction as the roots are shorter compared with the analogous teeth. Indicate the treatment of choice:

- A. waiting for spontaneous self-eruption, as the root apices did not translocate towards the developing permanent tooth germs.
- B. extraction of the teeth, as the root apices translocated towards the developing permanent tooth germs.
- C. careful surgical reposition and immobilizing.
- D. delayed extraction.
- E. none of the above.

#### Question nr 79

In the extensive class I carious lesion in tooth 16 of an 8-year-old child, the dentist found a hypertrophic tissue with a red and smooth surface, bleeding but not painful on probing. Which of the following are possible diagnoses?

- 1) gum polyp;
- 2) pulp polyp;
- 3) pulp necrosis;
- 4) proliferative pulpitis;
- 5) chronic granulomatous pulpitis.

The correct answer is:

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

#### Question nr 80

A patient aged 6 was admitted to the dental surgery. During a clinical

investigation a breakage of triangle edges on the occlusal surface was found. It can be the sign of:

- A.** inception of pulp inflammation.
- B.** pulp necrosis.
- C.** pulp gangrene.
- D.** periapical inflammation.
- E.** all the above.

**Question nr 81**

The most frequent type of injury in deciduous teeth in the maxilla is:

- A.** concussion.
- B.** luxation without displacement.
- C.** intrusion.
- D.** tooth crown fracture.
- E.** tooth root fracture.

**Question nr 82**

Find true sentences on the intentional decoronation of a tooth after injury:

- 1) can be performed in the case of root ankylosis in patients at developmental age;
- 2) can be performed in the case of root ankylosis only in adult patients;
- 3) its aim is to preserve the alveolar bone which may be essential if an osseointegrated implant is required in adulthood;
- 4) consists in cutting off the tooth crown and removing 1 mm of the alveolar bone;
- 5) consists in cutting off the crown coronally with relation to the enamel and cementum junction.

The correct answer is:

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



D. 1,3,4.

E. 1,5.

Question nr **83**

Indicate **the false** statement concerning fluoride:

A. so called "halo effect" is considered to be responsible for the greatest increase in prevalence of mild and very mild forms of fluorosis.

B. fluoridated salt is recommended by WHO if the introduction of artificially fluoridated water is not possible or the natural level of fluoride in drinking water is low.

C. aluminum decreases absorption of fluoride by organism.

D. reduction of caries by fluoridated milk intake is about 40-50%.

E. optimal level of fluoride in drinking water is 0.5-1.2 mg F/ml.

Question nr **84**

MTA (*Mineral Trioxide Aggregate*) **is not** indicated for:

A. retrofilling of root canal after the resection of root apex.

B. indirect pulp capping.

C. treatment of internal resorption.

D. closure of perforation and obturation of root canals.

E. direct pulp capping.

Question nr **85**

The method when a child is first presented to an object or situation that evokes little fear, and then progressively is introduced to stimuli that are more fear-provoking is called:

A. modelling.

B. tell-show-do method.

C. shaping.

D. systematic desensitization.

**E.** fading.

**Question nr 86**

Professionally applied fluoride products admitted for use in children under the age of six are:

**A.** foams.

**B.** gels.

**C.** varnishes.

**D.** rinses.

**E.** tablets.

**Question nr 87**

A 13-year-old boy reports to the dental office with a tooth traumatized the day before. After an X-ray and removal of the movable fragment of tooth crown 11 the diagnosis was made: a crown-root fracture with pulp exposure, after gingivectomy the tooth is suitable for reconstruction. What treatment should be used?

**A.** orthodontic extrusion of the remaining root fragment followed by endodontic treatment and tooth crown reconstruction.

**B.** surgical extrusion of the remaining root fragment followed by endodontic treatment and tooth crown reconstruction.

**C.** pulpotomy and tooth crown reconstruction.

**D.** pulp extirpation and tooth crown reconstruction.

**E.** starting the apexification process and applying a temporary dressing.

**Question nr 88**

Which of the following shows the radiograph of the mandible and the maxilla of a new-born child?

**A.** partial mineralization of permanent incisors and the first permanent molar.

**B.** partial mineralization of the crowns of milk teeth and the first permanent molar.

- C. partial mineralization of the crowns of milk teeth.
- D. partial mineralization of milk incisors and molars.
- E. partial mineralization of the crowns of milk incisors and canines.

Question nr **89**

Indicate the true statement concerning the extra-oral storage of the avulsed tooth:

- A. the longer the extra-oral time of an avulsed tooth stored dry or in improper media, the poorer the prognosis of the tooth after the replantation.
- B. the best medium to store an avulsed tooth to ensure the survival of periodontal ligaments in the next 24 hours, is 2% solution of NaF (natrium fluoride).
- C. tap water as an isotonic solution, is recommended to store an avulsed tooth.
- D. death of periodontal ligaments of avulsed tooth stored in improper media usually takes place after 6 hours from the injury.
- E. A and C are true.

Question nr **90**

Indicate the true statements concerning fluoride supplements:

- 1) using a fluoridated gel for 5 minutes every day is considered to be an effective method of the prevention of caries after radiotherapy;
- 2) acidified fluoride supplements should not be used in patients with glass-ionomer fillings;
- 3) 1.5% solution of ammonium fluoride gives 29000 ppm F;
- 4) 2<sup>nd</sup> generation of varnishes may contain amorphous calcium phosphate, chlorhexidine or arginine;
- 5) 2<sup>nd</sup> generation of varnishes contain only amorphous calcium phosphate.

The correct answer is:

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

**E. 1,2,3,5.**

**Question nr 91**

The pulp of deciduous tooth during its development and full formation is characterized by:

- 1) poor vascularization, a small number of cellular elements;
- 2) good vascularization, a large number of cellular elements;
- 3) lack of the subodontoblastic plexus and sensory fibers in the dentinal tubules;
- 4) greater defense potential compared with a mature tooth;
- 5) lower defense potential compared with a mature tooth;
- 6) less intense accumulation of tertiary dentin and a stronger inflammatory response compared with a mature tooth.

The correct answer is:

**A. 1,4,6.**

**B. 2,3,4.**

**C. 3,4,6.**

**D. 1,3,5.**

**E. 2,3,5.**

**Question nr 92**

In an X-linked vitamin D-resistant rickets one can find:

- 1) large pulp chambers with horns extending up to the dentino-enamel junction;
- 2) elongated pulp chambers with root furcations moved towards the apices;
- 3) delayed apical root closures;
- 4) small pulp chambers;
- 5) pulp stones.

The correct answer is:

**A. 1,5.**

**B. 1,3.**

**C. 2,3.**

**D. 4,5.**

**E. 2,5.**

Question nr **93**

The term 'primary prophylactics' refers to:

- A.** dentition free from caries.
- B.** initial stages of caries.
- C.** removal of caries complications.
- D.** non-cavity stage of caries.
- E.** eradication of carious bacteria.

Question nr **94**

Primarily primary prevention includes:

- A.** care of children from birth until the eruption of the first milk teeth.
- B.** care of children with primary dentitions.
- C.** education and dental care of a pregnant woman or both parents.
- D.** preventive actions in mothers and children up to 3 years of age.
- E.** preventive actions in mothers and children under 6 years old.

Question nr **95**

Indicate the true sentences concerning dens evaginatus:

- 1) in the case of a risk of breaking off the cusp, it is recommended to grind it and use a fissure sealant;
- 2) when the cusp is broken with pulp exposure in a tooth with an open apex, pulpotomy is indicated;
- 3) it occurs especially in primary dentition;
- 4) it occurs more often in permanent dentition;
- 5) another name for this pathology is dilated odontoma.

The correct answer is:

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

**D.** 2,4,5.

**E.** 1,2,4.

**Question nr 96**

Which of the following can be observed in the oral cavity of children with Crohn disease?

- 1) diffuse swelling of the lips;
- 2) candidiasis;
- 3) "cobblestone" appearance of the buccal mucosa;
- 4) linear ulceration or fissuring of the buccal mucosa and labial sulcus;
- 5) erosion of enamel.

The correct answer is:

**A.** 1,2.

**B.** 2,4.

**C.** 1,2,3.

**D.** 3,4,5.

**E.** 1,3,4.

**Question nr 97**

The replantation of an avulsed permanent tooth with an open apex needs the splinting of teeth for the period of:

- A.** up to 4 weeks, with elastic splint.
- B.** up to 7-14 days, with non-elastic splint.
- C.** up to 3 weeks, with non-elastic splint.
- D.** up to 2-3 weeks, with elastic splint.
- E.** up to 2 weeks with passive, elastic splint.

**Question nr 98**

Discharging sinus tract is a sign of:

- A.** acute periapical inflammation.
- B.** chronic, fibrous periapical inflammation.

- C. reversible pulpitis.
- D. chronic, purulent periapical inflammation.
- E. internal resorption.

Question nr **99**

Indicate the true statements concerning povidone iodine:

- 1) it is used in prevention and treatment of early childhood caries (ECC);
- 2) for a relatively long time, it lowers the level of cariogenic bacteria;
- 3) it can be used every 2-3 months;
- 4) it can be used 3 times, week by week and repeated every 6 months;
- 5) its application has got nothing to do with the use of fluoride varnish.

The correct answer is:

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

Question nr **100**

Brushing the teeth with toothpaste with fluoride should be started:

- A. at the moment of emergence of the first tooth.
- B. at the moment of emergence of all the first milk molars.
- C. at the moment when the full set of milk dentition appeared.
- D. at the moment of emergence of the first permanent molar.
- E. at the moment of emergence of the first permanent incisor.

Question nr **101**

Which of the following **should not** be used in children under 6 years for the prevention of caries?

- A. gel with fluoride of neutral pH.

**B.** gel with fluoride of acidic pH.

**C.** fluoride varnishes.

**D.** foams.

**E.** A,B,D are true.

Question nr **102**

The following description “Dark shade of dentine placed under locally fractured or intact enamel, the change looks like a dark surface with intact enamel or can also show a local fracture of enamel (wherein loss of continuity of enamel does not reveal the dentine), shade of dentine is more visible on a wet surface of tooth, the shade is connected with discoloration (color: grey, blue or brown) caused by caries, which shines through the enamel” concerns a primary caries lesion located in pits and fissures that can be categorized as:

**A.** code 3 by ICDAS II.

**B.** code 4 by ICDAS II.

**C.** code 5 by ICDAS II.

**D.** P4 by WHO.

**E.** loci 1, stadium 3, by Lasfargues and Louis classification.

Question nr **103**

Fluoridated mouth rinses are used at home, as additional preventive aid. For children with a high risk of caries and over 6, the concentration of fluoride in mouth rinses used every day should be:

**A.** 0.01% of NaF.

**B.** 0.02% of NaF.

**C.** 0.05% of NaF.

**D.** 0.1% of NaF.

**E.** 0.2% of NaF.

Question nr **104**



Indicate **the false** statement concerning caries prevention:

- A.** use of the toothpaste with arginine and calcium but without fluoride ensures the same anticaries efficacy like of the toothpaste with 1100 ppm of fluoride.
- B.** toothpastes which contain calcium sodium phosphosilicates and fluoride are recommended in the prevention of both: caries and hypersensitivity of dentine in children at the age of over 12 years.
- C.** in long-term use of chlorhexidine it comes to the risk of opportunistic infections and a bacterial resistance to its activity.
- D.** longer and systematic usage of xylitol creates the growth of xylitol resistant bacterial strains of *Streptococcus mutans*, which cannot transport the chemical to their cells.
- E.** creams with CPP-ACFP complex are contraindicated in people with milk allergy, benzoate allergy and in children under the age of 6 years.

Question nr **105**

Milk teeth caries is characterized by:

- 1) developed stage of disease with weak evidence of clinical symptoms;
- 2) chronic course of disease that allows delayed preparation and cavity restoration;
- 3) rapid moving of the disease from one stage to another, more developed one;
- 4) fewer symptoms comparing with permanent teeth in adults;
- 5) lower risk of pulpal complication comparing with permanent teeth in adults.

The correct answer is:

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

Question nr **106**

An intrusion of permanent tooth leads to the high risk of tooth loss because of:

- A.** increased mobility of the tooth after trauma.
- B.** development of progressive root resorption.
- C.** delayed arrival of the patient to the dental surgery.
- D.** need of tooth extraction.
- E.** this type of trauma does not pose a risk to tooth loss.

Question nr **107**

To restore a fractured crown of the tooth after trauma with the use of composite material one should:

- A.** clean the tooth surface and apply fluoride varnish.
- B.** make a temporary restoration, leave it for two weeks before the final restoration.
- C.** avoid products containing alcohol.
- D.** put a glass-ionomer lining.
- E.** follow strictly the manufacturer's instructions.

Question nr **108**

Preventive Resin Restoration type I (PRR I) should be performed:

- 1) in the case of caries in enamel of the fissure;
- 2) in the case of spot caries within enamel and dentine;
- 3) in the case of an extensive but shallow caries lesion on the occlusal surface;
- 4) by using fissure sealant for cavity restoration and protecting remaining fissures;
- 5) by using glass-ionomer or composite materials for cavity restoration and fissure sealant for protecting remaining intact fissures.

The correct answer is:

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

E. 2,4.

Question nr **109**

A 3-year-old child comes to the dental surgery with avulsed tooth 51 one hour after the accident. What is the correct treatment?

- A.** root canal treatment outside the mouth - "in hand", replanting the tooth and splinting teeth for 7-14 days.
- B.** replantation of the tooth, splinting teeth for 7-14 days and a periodic estimation of pulp vitality.
- C.** replantation of the tooth, splinting teeth for 3-4 weeks, then after 3-4 weeks root canal treatment.
- D.** no replanting is needed.
- E.** no replanting is needed, however regular check-ups till the eruption of permanent tooth are advised.

Question nr **110**

In the case of a milk incisor with a complicated crown fracture and advanced resorption of the roots, a proper therapeutic attitude should be based on:

- A.** sealing the pulp with non-setting calcium hydroxide paste.
- B.** vital, partial pulpotomy.
- C.** pulpectomy.
- D.** extraction.
- E.** sealing the pulp with MTA.

Question nr **111**

Which of the following might be the sequel of trauma in deciduous teeth:

- 1) dilaceration of the root of the permanent successor;
- 2) obliteration of the pulp of the permanent successor;
- 3) external resorption of the milk tooth;
- 4) ankylosis of the root of the milk tooth;
- 5) hypoplasia of the milk tooth.

The correct answer is:

**A.** 1,3,4.

**B.** 1,2,4.

**C.** 2,3,4.

**D.** 2,3,5.

**E.** 2,4,5.

Question nr **112**

Indicate characteristic features of polymer fissure sealants:

- 1) relatively high mechanical strength;
- 2) high surface tension;
- 3) acid etching of enamel is a requirement;
- 4) presence of acidic monomers;
- 5) low moisture sensitivity;
- 6) moisture protection is a requirement.

The correct answer is:

**A.** 1,2,3,4.

**B.** 1,3,6.

**C.** 2,3,5.

**D.** 2,3,4,5.

**E.** 2,3,4,6.

Question nr **113**

Tetracycline therapy used in children under 7 years of age can cause tooth discoloration. Which area of the tooth will be mostly affected by discoloration?

**A.** mainly the cervical area of the tooth.

**B.** incisal edges of incisors and cusps of the lateral teeth.

**C.** evenly distributed on all surfaces of the tooth.

**D.** incisal edges of incisors and evenly distributed on all surfaces of lateral teeth.

**E.** cervical areas of incisors and cusps of the lateral teeth.

Question nr 114

The characteristic features of ectodermal dysplasia are:

- 1) delayed tooth eruption;
- 2) accelerated tooth eruption;
- 3) normal sweat glands in the anhidrotic form;
- 4) conical teeth;
- 5) EDA gene mutation as a possible reason;
- 6) supernumerary teeth.

The correct answer is:

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

Question nr 115

The Atraumatic Restorative Treatment (ART) technique is based on:

- A.** removal of caries with hand instruments.
- B.** chemo-mechanical removal of demineralized dentine.
- C.** using Sonic system.
- D.** using Yag-ER laser.
- E.** using slow speed handpiece.

Question nr 116

What is the sequence of primary teeth eruption according to Szpringer-Nodzak?

- A.**  $i_1 > i^1 > i^2 > i_2 > m^1 = m_1 > c^0 = c_0 > m^2 > m_2$ .
- B.**  $i_1 > i^1 > i_2 > i^2 > m^1 = m_1 > c^0 = c_0 > m^2 = m_2$ .
- C.**  $i_1 > i^1 > i^2 > i_2 > m^1 = m_1 > c^0 = c_0 > m^2 = m_2$ .

D.  $i_1 > i^1 > i^2 = i_2 > m^1 = m_1 > c^0 = c_0 > m^2 = m_2$ .

E.  $i_1 > i^1 > i^2 > i_2 > m^1 = m_1 > c^0 > c_0 > m^2 = m_2$ .

Question nr **117**

In the case of a fracture of a crown within enamel and dentine tissues, there is a prompt necessity to:

- A. protect exposed dentine.
- B. cover exposed tooth tissues with fluoride varnish.
- C. immobilize the tooth and two adjacent teeth with the splint.
- D. check the vitality of pulp with ethyl chloride.
- E. apply a stainless steel crown.

Question nr **118**

The most objective and reliable method for checking children's pulp vitality is:

- A. observation and diaphanoscopy.
- B. observation and patients' pain complains.
- C. checking tooth mobility.
- D. reaction to thermal stimuli.
- E. reaction to electric stimuli.

Question nr **119**

Find the **false** statement on the so-called "enamel pearl":

- A. can be built only of enamel and be placed in the cervical area of a tooth.
- B. its creation is connected with the presence of remnants of Hertwig's sheath.
- C. it can be composed of both enamel and dentine.
- D. its creation is connected with the presence of Malassez's epithelial cells.
- E. it is a characteristic feature of shell teeth.

Question nr **120**

Indicate the true sentence on milk teeth pulpotomy:

- A.** pulpotomy should be performed at the level of the bottom of the pulp chamber.
- B.** pulpotomy should be performed at the depth of 2 mm of the crown pulp.
- C.** pulpotomy can be performed when there is no pain or the pain is mild and transient.
- D.** true answers are A and C.
- E.** true answers are B and C.

Question nr **121**

Which of the following sentences on the premature eruption of milk teeth is **false**?

- A.** neonatal teeth appear soon after childbirth.
- B.** natal teeth are most often supernumerary teeth.
- C.** natal and neonatal teeth in most cases look like normal teeth.
- D.** natal and neonatal teeth are an extreme example of premature eruption.
- E.** most often they are incisors in the mandible.

Question nr **122**

The classification of caries lesions by Mount and Hume (1998) describes:

- A.** extensity of lesions.
- B.** location and extensity of lesions.
- C.** type of dental material used.
- D.** mode of cavity preparation.
- E.** location of lesions.

Question nr **123**

In what storage medium is it best to place a permanent tooth after an evulsion if the patient can reach the dental office within 2 hours?

- A.** in saliva, tissue culture solution, isotonic solution.
- B.** in yogurt, milk, saliva.
- C.** in demineralized water, tissue culture solution, fluoride rinse.
- D.** in saliva, isotonic solution, saline.
- E.** in saliva, milk, tissue culture solution.

**Question nr 124**

The use of fluoride mouth rinses containing 0.2% NaF/1000 ppmF is indicated in:

- A.** children over the age of 4.
- B.** all children.
- C.** children after orthodontic treatment.
- D.** children with a high risk of caries.
- E.** children with a cleft palate.

**Question nr 125**

In a 7-year-old healthy, cooperating child, the necrosis of pulp in tooth 63 was found. The treatment of choice will be:

- A.** root canal treatment.
- B.** extraction.
- C.** formocresol amputation.
- D.** ferric sulphate amputation.
- E.** wide opening of the pulp chamber.

**Question nr 126**

Indicate the true statements concerning fluoridated varnish:

- 1) use of fluoridated varnish in children below the age of 6 years poses a risk of tooth fluorosis development;



- 2) high level of fluoride in enamel is kept for 1-7 days after varnish application;
- 3) high level of fluoride in enamel is kept for 10-15 minutes after varnish application;
- 4) reduction of caries in permanent teeth is 46%;
- 5) periodic varnish application can induce mild symptoms of acute fluoride intoxication.

The correct answer is:

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

#### Question nr 127

The fall of a 3-year-old child caused the root tip of tooth 51 to move in the labial direction. Clinically, half the crown is visible and no malocclusion. X-ray revealed a visible root tip, shorter than that of the adjacent tooth, and no root fracture. The most appropriate treatment should be:

- A.** periodic observation.
- B.** immediate tooth extraction.
- C.** tooth extrusion and splinting for 3 weeks.
- D.** tooth extraction and replanting in the right position.
- E.** cosmetic reconstruction of the shortened crown.

#### Question nr 128

High risk factors of dental caries in a 5-year-old child, according to the Caries Assessment Risk Scale (CRA) include:

- 1) need of pediatric special care;
- 2) intake of sugar containing beverages of soft drinks more than 3 per day;
- 3) presence of dental plaque;
- 4) dmft > 1 (above 1);
- 5) presence of white spots or other enamel defects.

The correct answer is:

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

Question nr **129**

Indicate **the false** statement concerning hyperbilirubinemia:

- A. it causes tooth discoloration because of bilirubin accumulation in layers of enamel and dentine during the process of mineralization.
- B. discoloration may be present in both deciduous and permanent dentitions.
- C. is present in children at various ages.
- D. distinct demarcation between discolored and non-discolored areas is often observed.
- E. changes may be in red-brown or brown-black color (fluorescence under UV light).

Question nr **130**

In the case of the intrusion of a permanent tooth with closed apex to the depth of about 5 mm, the treatment of choice **does not** include:

- A. waiting for spontaneous re-eruption.
- B. orthodontic repositioning.
- C. root canal treatment during the first 2-3 weeks after trauma.
- D. surgical repositioning.
- E. splinting for a period of 4-8 weeks.

Question nr **131**

Indicate **the false** statement concerning the use of agents for topical fluoridation:

- A.** varnish with ACPF complex is effective in the treatment of dentine hypersensitivity.
- B.** gels and foams with APF complex should not be used in patients with composite restorations.
- C.** for children with deciduous dentition 0.25 ml is an one-time dose of varnish containing 5% NaF.
- D.** varnishes with fluoride and with ACP complex may also contain chlorhexidine.
- E.** ammonium fluoride in Fluor Protector S agent delivers 22600 ppm F.

Question nr **132**

Indicate **the false** statements concerning the transmission of cariogenic bacteria to child's oral cavity:

- 1) it always takes place after the eruption of first milk teeth;
- 2) it can take place before the eruption of the first milk tooth;
- 3) most often it takes place between 19 and 31 months of age;
- 4) most often it takes place between 6-12 months of age (after the eruption of the first teeth) and 26-28 months of age (after the termination of teething);
- 5) times of the transmission and colonization of the oral cavity by cariogenic bacteria does not affect the risk of early childhood caries (ECC) development.

The correct answer is:

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

Question nr **133**

Indicate a **contraindication** to the usage of stainless steel crowns in children:

- A.** two or more caries-infected tooth surfaces.
- B.** high risk of caries.

- C. teeth after pulp treatment.
- D. presence of enamel defects.
- E. deciduous teeth in physiological exfoliation.

Question nr **134**

Preventive Resin Restoration (PRR) is **contraindicated** in a case of:

- A. lesions involving enamel only.
- B. *caries incipiens* reaching the dentine.
- C. small class I by Black lesions.
- D. *caries florida*.
- E. none of the above.

Question nr **135**

A 14-month-old child has been fretful for a couple of days and his body temperature is elevated. Two days before a dental visit, a redness of the oral mucosa and edema of the gingiva appeared. Soon small vesicles occurred. At the visit, there are oral ulcers with erythematous margins. The most probable diagnosis is:

- A. infectious mononucleosis.
- B. varicella.
- C. signs and symptoms related to teeth eruption.
- D. herpangina.
- E. primary herpetic gingivostomatitis.

Question nr **136**

Which of the following can be used for the obturation of root canals in milk teeth?

- 1) calcium hydroxide paste;
- 2) zinc oxide eugenol paste;
- 3) endomethasone paste;
- 4) method of cold lateral condensation of gutta-percha;
- 5) one gutta-percha point method sealed with calcium hydroxide paste.

The correct answer is:

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

Question nr **137**

Direct pulp capping in permanent teeth **should not** be performed in the case of:

- A. small carious exposure.
- B. no spontaneous pain and no swelling.
- C. lack of changes on an x-ray.
- D. possible haemostasis of the exposed pulp.
- E. pulp polypus.

Question nr **138**

Which of the following is used as a base for the impregnation procedure in Poland?

- A. 10-40% silver nitrate.
- B. 40-60 % silver nitrate.
- C. 30-50% zinc chloride.
- D. true answers are A and C.
- E. true answers are B and C.

Question nr **139**

Red discoloration of permanent teeth may be caused by:

- A. chromogenic bacteria.

- B.** congenital porphyria.
- C.** hyperbilirubinemia in early childhood.
- D.** Beltrami disease (circular caries).
- E.** mercury poisoning.

Question nr **140**

Which of the teeth will become discolored in a 9-year-old child after a therapy with tetracycline antibiotics?

- A.** all permanent teeth.
- B.** no teeth.
- C.** premolars teeth.
- D.** incisal edges of permanent incisors.
- E.** first permanent molars.

Question nr **141**

Green extrinsic tooth discoloration results from:

- A.** iron supplementation.
- B.** chromogenic bacteria.
- C.** tetracycline intake.
- D.** A and B are correct.
- E.** A and C are correct.

Question nr **142**

The following was found in an 8-year-old patient during clinical examination: carious cavity and filling in tooth 16, sealant in tooth 26, dressing in tooth 36 on two surfaces, discoloration on tooth 11, caries in teeth 55, 65, 75, fillings in teeth 54, 74 and dressing in tooth 84. Tooth 64 was removed because of caries. Calculate the DMFT indicator:

- A.** DMFT = 2.
- B.** DMFT = 3.

**C.** DMFT = 4.

**D.** DMFT = 8.

**E.** DMFT = 10.

**Question nr 143**

Which of the following sentences concerning molar-incisor hypomineralization are true?

1) it presents itself as a localized opacity, discoloration or enamel loss;

2) it presents itself only as a localized discoloration;

3) all of the first permanent molars are involved;

4) one or more permanent molars or incisors may be involved;

5) is connected with a developmental defect in the first year of life.

The correct answer is:

**A.** 1,4.

**B.** 1,4,5.

**C.** 2,4.

**D.** 2,3,5.

**E.** 2,4,5.

**Question nr 144**

A 12-year-old girl had a tooth injury a few hours before the X-ray that revealed the final stage of root development of teeth 11 and 21 and the root of the tooth 11 fractured at a half of its length. Tooth 11 shows a slight displacement, the reaction of the pulp to the cold stimuli is normal. Indicate the proper treatment:

**A.** reposition, rigid teeth splinting for 4 weeks and observation.

**B.** reposition, elastic teeth splinting for 4 weeks and observation.

**C.** reposition, elastic teeth splinting for 8-12 weeks and observation.

**D.** reposition, performing pulp extirpation to the fracture line and splinting for a period of 8-12 weeks.

**E.** removal of the coronal part of the tooth and orthodontic extrusion of the remaining root fragment.

Question nr **145**

Genetically determined anomaly occurring in molar teeth characterized by the pulp chamber that is vertically enlarged at the expense of the roots is called:

- A.** microdontia.
- B.** taurodontism.
- C.** rhizomegalia (elongation of the roots).
- D.** rhizomicria (shortening of the roots).
- E.** dens invaginatus.

Question nr **146**

Find true statements on physiological resorption of roots in a primary tooth:

- 1) it is a long-term process in which the periods of active resorption can be interrupted by the periods of repairing processes;
- 2) is present even in the case of a lack of the permanent successor;
- 3) begins 2-4 years before the physiological replacement of teeth.

The correct answer is:

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

Question nr **147**

A patient at the age of 8 reported to the dental office after an injury of the central upper incisor which occurred several hours earlier. Medical examination revealed that this permanent tooth was intruded to 3 mm. The procedure in this case consists in:

- A.** orthodontic reposition after 1 week from the injury.
- B.** root canal treatment up to 2 weeks after the injury.



**C.** surgical reposition and immobilization for 7-10 days.

**D.** immobilization of the tooth for 3 weeks after orthodontic reposition.

**E.** leaving the tooth for the re-eruption and observation.

**Question nr 148**

Find the indications for pit and fissure sealing:

- 1) high risk of caries, regardless the time that has passed since tooth eruption;
- 2) high risk of caries, only in a short time after tooth eruption;
- 3) molar and premolar teeth in physically or mentally disabled patients;
- 4) fissures with hypoplasia;
- 5) teeth with point caries changes in a fissure.

The correct answer is:

**A.** 1,3,4.

**B.** 2,3,4.

**C.** 2,3,4,5.

**D.** 1,3.

**E.** 2,3,5.

**Question nr 149**

Preventive resin restoration (PRR) can be performed:

**A.** in a small caries lesion on all the surfaces of teeth.

**B.** in a small caries lesion on all the surfaces of permanent teeth.

**C.** in a small caries lesion on the occlusal surface of primary teeth.

**D.** in an incipient occlusal lesion almost touching dentine of permanent teeth.

**E.** in primary and secondary caries occlusal lesions of permanent teeth.

**Question nr 150**

In the dentition of a 4-year-old child there is no tooth 82, and the tooth 81 has an enlarged crown with a shallow fissure on the labial surface and an indentation on the incisal edge. On the x-ray of 81 there are 2 separate root canals. Such a state is called:

- A.** fusion.
- B.** concrescence.
- C.** gemination.
- D.** Leong tooth.
- E.** dens invaginatus.

Question nr **151**

The process of enamel demineralization can be reversed or minimalized by:

- 1) increased flow of saliva;
- 2) higher density of saliva;
- 3) lower density of saliva;
- 4) presence of fluoride in saliva;
- 5) decreased level of phosphate ions and an increased level of calcium ions in saliva.

The correct answer is:

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

Question nr **152**

Indicate the definition of Molar-Incisor Hypomineralization (MIH):

- A.** quantitative developmental defect of enamel, caused by general factors, affecting first permanent molars and incisors.
- B.** quantitative developmental defect of enamel, caused by general and local factors, affecting permanent molars and incisors.
- C.** qualitative developmental defect of enamel, caused by general factors, affecting at least one first permanent molar tooth and often incisors.
- D.** qualitative developmental defect of enamel, caused by general and local factors, affecting at least one permanent molar and often incisors.

**E.** quantitative developmental defect of enamel, caused by local factors, affecting at least one first permanent molar and often incisors.

Question nr **153**

"Stains and abrasion on occlusal surfaces of first permanent molars and the incisal edges of permanent incisors; caries involving one or two surfaces, without damages of tooth cusps; often increased sensitivity to external stimuli, regular or irregular shape of teeth and restoration". The description refers to:

**A.** *dentinogenesis imperfecta* type II.

**B.** mild form of fluorosis.

**C.** moderate form of MIH.

**D.** severe form of MIH.

**E.** *amelogenesis imperfecta* type I.

Question nr **154**

Indicate the true statement concerning dental trauma:

**A.** intruded teeth to the depth of < 5mm (below 5 mm) show the lower rate of external root resorption.

**B.** teeth with open apex show smaller ability of healing if it is a case connected with an exposure of the pulp or a fracture of the root than teeth with a close apex.

**C.** in a case of tooth intrusion <5 mm (below 5 mm), necrosis of the pulp is often observed.

**D.** in permanent teeth with open apex, leaving an unsealed fractured crown can lead to pulp necrosis.

**E.** avulsed teeth should be kept in HBSS solution, saline, milk, water or saliva.

Question nr **155**

The indications for partial pulpotomy in an immature permanent tooth include:

1) small, carious exposure of the pulp;

- 2) spontaneous pain and dark-red bleeding from the exposed pulp;
- 3) presence of a fistula;
- 4) edema;
- 5) moderate bleeding of bright red blood from the pulp.

The correct answer is:

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

#### Question nr 156

Which of the following sentences concerning restorative materials used in milk molar teeth are **false**?

- 1) glass-ionomer materials should not be used in a restoration of deep lesions exposed to heavy mastication forces if the restoration is to remain in mouth for longer than 3 years;
- 2) glass-ionomer materials can be used in a restoration of big cavities, exposed to heavy mastication forces if the restoration is to remain in mouth for longer than 5 years;
- 3) durability of an amalgam restoration is comparable to that of glass-ionomer one;
- 4) amalgam material can be used in children with a moderate risk of caries and in uncooperative ones;
- 5) compomers do not provide good retention in milk teeth.

The correct answer is:

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

#### Question nr 157

An injury to the tooth and ligament without displacement with increased mobility, and tenderness to percussion with a bleeding from the gingival

socket is called:

- A.** concussion.
- B.** subluxation.
- C.** intrusive luxation.
- D.** lateral luxation.
- E.** extrusive luxation.

Question nr **158**

Find the true sentence on the neonatal line:

- A.** it is present only in primary teeth.
- B.** it is present in permanent teeth mineralizing in the fetal period.
- C.** it is a boundary between enamel that mineralizes in the fetal period and the one that mineralized after the birth.
- D.** it is not present in children from complicated pregnancy.
- E.** it is present in all deciduous and permanent teeth.

Question nr **159**

Which of the following is a result of apexogenesis?

- 1) regular root length;
- 2) normal thickness of root dentin;
- 3) open root apex, with point resistance felt while introducing the file into the root canal;
- 4) thin layer of root dentine;
- 5) physiological closure of the root apex;
- 6) closure of the root apex without constriction of the root canal.

The correct answer is:

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

E. 1,4,6.

Question nr **160**

In a child aged 5, a deep caries lesion with a pulp exposure in the tooth 84 was found. The pulp hurts and bleeds while pressed. On an x-ray one can find a lesion extending to the pulp chamber, no other pathological changes. After amputation of the crown pulp, an abundant bleeding was present from the radicular pulp. The optimal treatment should be:

- A. extraction.
- B. postpone the treatment till the next visit.
- C. apply MTA cement and postpone the restoration.
- D. formocresol pulpotomy.
- E. pulpectomy.

Question nr **161**

An indication for indirect pulp capping in the deciduous tooth is:

- A. pulp exposure and its reaction to probing.
- B. reaction to tapping and probing.
- C. spontaneous pain and bleeding from the pulp.
- D. pulp exposure.
- E. reaction to probing.

Question nr **162**

After pulpectomy of the pulp in tooth 85 with a use of MTA in a 5-year-old child the best way to restore the tooth is to use:

- A. silver amalgam.
- B. resin-modified glass-ionomer.
- C. stainless steel crown.
- D. composite.
- E. compomers.

Question nr **163**

In a healthy and cooperative child aged 5, a carious exposure of the pulp in a cavity class II by Black was found in the second lower milk molar. No pain had been noticed in the past, no increased mobility of the tooth and no changes in the local mucous membrane were present. On an x-ray, no inflammatory periapical changes were found. There was a positive pulp reaction to cold stimuli. The proper treatment is:

- A.** Cvek pulpotomy.
- B.** devitalization of the pulp and pulpectomy.
- C.** amputation of the pulp using ferric sulfate or formocresol when hemostasis can be achieved within 5 minutes.
- D.** intravital pulpectomy if the hemostasis can be achieved within 5 minutes.
- E.** extraction of the tooth.

Question nr **164**

Pulpless deciduous teeth should be:

- A.** treated only under general anesthesia.
- B.** treated conservatively or surgically.
- C.** after opening the pulp chamber left as space maintainers.
- D.** after opening the pulp chamber observed by dentist.
- E.** treated over the age of 6.

Question nr **165**

Which of the followin is an indication for the two-step treatment of caries (so-called: two-step excavating of caries) in a patient at the developmental age?

- A.** deep caries lesion with demineralization seen on x-ray involving 75% of dentin.
- B.** periodic spontaneous pain.
- C.** prolonged reaction of the pulp to cold stimuli.

**D.** presence of periapical inflammatory lesions.

**E.** B and C are true.

Question nr **166**

Which of the following is preferred as a final filling of the canal after the apexification procedure?

**A.** iodoform paste used as a sealer.

**B.** filling the canal with oxide-zinc-eugenol cement.

**C.** applying the method of single cone.

**D.** technique of thermally plasticized gutta-percha.

**E.** method of lateral condensation of gutta-percha cones.

Question nr **167**

The late complications of luxation of a permanent tooth may include:

- 1) inflammatory resorption;
- 2) resorption of successor tooth germ;
- 3) pulp necrosis;
- 4) pulp chamber obliteration;
- 5) dilacerations of the tooth root;
- 6) arresting of root development;
- 7) hypoplasia of the tooth crown.

The correct answer is:

**A.** 1,3,5,7.

**B.** 1,3,4,6.

**C.** 2,3,5,7.

**D.** 1,2,4,5,7.

**E.** 3,4,5,6.

Question nr **168**

A 14-year-old patient comes to the dental surgery 45 minutes after the avulsion of tooth 11. The tooth is in foil wrappers. What is the correct treatment?



- A.** replanting the tooth, splinting the teeth for 10-14 days, antibiotic administration, and later, regular monitoring of pulp vitality.
- B.** replanting the tooth, splinting the teeth for 10-14 days, antibiotic administration, immediate root canal treatment before the removal of the splinting.
- C.** replanting the tooth, splinting the teeth for 10-14 days, antibiotic administration, starting an apexification procedure after the removal of the splinting.
- D.** root canal treatment of the avulsed tooth “outside mouth” before replantation.
- E.** removal of damaged periodontal ligament tissues, immersing the tooth in a 2% sodium fluoride solution before replantation.

Question nr **169**

“Most often it affects a single tooth, less common - two or three teeth. The affected tooth usually appears smaller than a normal tooth, may have a typical shape, but more often it has a conical form with a shorter root. Very often its presence disturb the eruption of permanent incisors in the maxilla, less often in the mandible. It can be a cause of the cyst, resorption of roots of neighboring teeth, or translocation”. That is a description of:

- A.** invaginated tooth.
- B.** mesiodens.
- C.** Turner’s tooth.
- D.** crocodile dentition.
- E.** Hutchinson’s teeth.

Question nr **170**

The syndrome characterized by the lack of many tooth germs, thin hair, dry skin, malformation of the mandible and maxilla and lip inversion is called:

- A.** cherubism.
- B.** ectodermal dysplasia.
- C.** cleidocranial dysplasia.

**D.** Capdepont disease.

**E.** odontodysplasia.

Question nr **171**

A talon cusp may be present in:

**A.** incisors.

**B.** canines.

**C.** premolars.

**D.** molars.

**E.** deciduous molars.

Question nr **172**

Indicate the correct place of insertion of the needle during the inferior alveolar nerve block in a child with full deciduous dentition:

**A.** inner border of the retromolar trigone at the level of the occlusal plane of the lower molars.

**B.** outer border of the retromolar trigone at the level of the occlusal plane of the lower molars.

**C.** inner border of the retromolar trigone at the level of the occlusal plane of the upper molars.

**D.** outer border of the retromolar trigone at the level of the occlusal plane of the upper molars.

**E.** inner border of the retromolar trigone about 1 cm above the occlusal plane of the lower molars.

Question nr **173**

Indicate the true statements concerning air abrasion:

1) can remove enamel and dentine tissues as well as amalgam and composite restorations;

2) can be used as a diagnostic tool in the case of suspected caries in discolored fissures before their sealing. It may be used in a conservative preparation of initial caries changes;

3) replaces acid etching, necessary before dental adhesive system

application;

4) is not harmful to the gums;

5) is harmful to the gums.

The correct answer is:

**A.** 1,3,4.

**B.** 1,2,3,5.

**C.** 1,2,4.

**D.** 2,3,5.

**E.** 2,5.

#### Question nr 174

Which of the sentences on Atraumatic Restorative Treatment (ART) method, are **false**?

1) is used only in the remote areas of poorly developed countries;

2) can be used in the dental surgery in children with behavioral problems;

3) is based on removing dental caries with hand instruments and restoring the cavity with glass-ionomer cement modified with resin;

4) is based on removing infected dentine with hand instruments and restoring the cavity with self-cured glass-ionomer cement;

5) is based on a chemo-mechanical preparation of the infected dentine and removing it with hand instruments, than restoring the cavity with self-cured glass-ionomer cement.

The correct answer is:

**A.** 1,3,5.

**B.** 2,3,5.

**C.** 2,5.

**D.** 1,3.

**E.** 2,4,5.

#### Question nr 175

Caries incipiens in the form of white spot lesions:

1) is a subsurface demineralization of enamel;

2) is a subsurface demineralization of enamel and dentin;

3) is associated with hypermineralization of the subsurface enamel layer;

4) is inactive if its surface has a chalky appearance;

5) has the shape of a cone directed apically towards the enamel-dentin junction.

The correct answer is:

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

#### Question nr 176

Indicate **the false** statement concerning the pulp amputation in milk teeth:

- A. formocresol, ferrous sulfate and MTA are the most commonly used in the pulp amputation of milk teeth.
- B. after the pulp amputation in milk teeth, the calcification is often observed.
- C. if the arrest of bleeding from pulp stumps is impossible in 3-4 minutes, pulp extirpation or tooth extraction is recommended.
- D. after the removal of coronal pulp, a cotton pellet with 15.5% solution of ferrous sulfate can be placed in the pulp chamber for 5 minutes.
- E. there were trials of pulp amputation with 2% glutaraldehyde, iodoform, or 3-6% solution of sodium hypochlorite.

#### Question nr 177

An increased mobility of a tooth can occur after:

- 1) concussion;
- 2) subluxation;
- 3) extrusion;
- 4) intrusion;
- 5) fracture of the root, regardless of its localization.

The correct answer is:

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

D. only 3.

E. 2,3,5.

Question nr **178**

“Double tooth” **is not** a tooth after:

A. fusion.

B. invagination.

C. connation.

D. gemmination.

E. abnormal separation or connection of tooth buds in different stages of development.

Question nr **179**

The preventive resin restoration type 2 (PRR-2) is indicated in the case of:

A. diagnostic doubts regarding the presence of caries in the fissure before sealing.

B. diagnostic doubts regarding the presence of caries on the interproximal surfaces in incisors and canines.

C. a slight carious lesion on the interproximal surface of the teeth, clinically perceptible, including dentine, but limited to a small area.

D. a small carious lesion visible on the cervical surface of the teeth, clinically perceptible, including dentine, but limited to a small area.

E. carious lesions on occlusal surfaces, clinically perceptible, including dentine, but limited to a small area.

Question nr **180**

A cooperative patient aged 5, in a good general health, having regular dental treatment and with no active caries lesions, has a spontaneous pain in tooth 85. The bleeding from the pulp is hard to arrest, the pulp reacts to stimuli, gives no response to tapping, and there is no changes in the periapical area on an x-ray. Indicate the proper treatment:

- A. devitalization and the amputation of pulp.
- B. amputation of vital pulp with a use of formocresol.
- C. amputation of vital pulp with a use of ferrum sulfate.
- D. amputation of pulp with a use of calcium hydroxide or MTA.
- E. root canal treatment.

Question nr **181**

In a boy aged 12, tooth 11 was replanted 2 hours from the avulsion. The tooth was transported in plastic foil. Which is the most favorable result that can be anticipated?

- A. vital periodontal membrane.
- B. ankylosis.
- C. root resorption.
- D. pulp revascularization.
- E. A and D are true.

Question nr **182**

The predominantly hypoplastic form of amelogenesis imperfecta is characterized by:

- 1) lack of contact points between teeth;
- 2) lack of possibility to radiographically distinguish between enamel and dentine because of the same degree of mineralization of both tissues;
- 3) resorption of unerupted teeth;
- 4) delayed eruption of teeth;
- 5) widening pulp chambers.

The correct answer is:

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

Question nr **183**

A 12-year-old patient came to the dentist's office because of a slight elevation at the bottom of the mouth, which is painless, soft, blue-gray, well demarcated from the surroundings. The probable diagnosis is:

- A. gingival cyst.
- B. Epstein pearl.
- C. Bohn's nodule.
- D. extravasation cyst.
- E. eruption cyst.

Question nr **184**

An endodontic treatment of milk teeth may be performed in the case of:

- A. congenital heart disease.
- B. acute dental infection.
- C. child's good cooperation with the dentist.
- D. heavy tooth mobility.
- E. gross devastation of tooth hard tissues.

Question nr **185**

Small white papules surrounded by an erythematous margins that cover the buccal mucosa can be initially found in the course of:

- A. mumps.
- B. scarlet fever.
- C. leukemia.
- D. measles.
- E. rubella.

Question nr **186**

Xylitol used in caries prevention, most often in the form of chewing gums or drops, is recommended:

- 1) for children over 4 years of age;
- 2) for children over 6 years of age;
- 3) in the divided daily dose of 3-8 grams;
- 4) in the single daily dose of 0.5-1.0 gram;
- 5) at least twice a day.

The correct answer is:

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

Question nr **187**

“Molar tooth with a pulp chamber that is vertically enlarged at the expense of the roots”- this is a description of:

- A.** cynodontism.
- B.** “crocodile” teeth.
- C.** “fish” teeth.
- D.** Turner tooth.
- E.** taurodontism.

Question nr **188**

In which of the following **it is not indicated** to perform a conservative treatment of milk teeth with infected pulp?

- A.** incisors after mechanical trauma in children under the age of 4-4 ½ years.
- B.** second molar teeth before the eruption of the first permanent molar teeth.
- C.** deciduous molar teeth with advanced physiological resorption of roots.
- D.** totally formed root and good general health of a child.



**E.** multi-rooted teeth when there is no successor.

Question nr **189**

Enamel pearls:

**A.** most often are localized in root bifurcations of molar teeth, less often on roots of premolar or incisor teeth.

**B.** are hard nodules placed in the midline of the palate (palatal suture).

**C.** are localized in the lateral parts of the palate, most often on the border between the soft and hard palate and on the labial/buccal surface of the gingival shaft.

**D.** do not increase the risk of periodontal disease.

**E.** are more often present in milk than in permanent dentition.

Question nr **190**

Shortened roots and pulp chamber obliteration, among other symptoms, are present in:

- 1) dentinal dysplasia type I;
- 2) dentinal dysplasia type II;
- 3) dentinogenesis imperfecta;
- 4) X-linked vitamin D-resistant rickets;
- 5) odontodysplasia.

The correct answer is:

**A.** 1,2.

**B.** 3,4.

**C.** 1,5.

**D.** 1,3.

**E.** 3,5.

Question nr **191**

During the preparation of a caries lesion with a hand instrument the pulp was exposed in an asymptomatic tooth 75 in a 5-year-old child. The surface of the pulp exposure was about 2 mm<sup>2</sup>. The treatment of choice will be:

**A.** direct cover with MTA.

- B.** direct cover with calcium hydroxide and delayed restoration.
- C.** vital pulp amputation with calcium hydroxide.
- D.** formocresol pulp amputation according to Buckley.
- E.** pulpectomy after the pulp devitalization.

Question nr **192**

Which of disturbances in the structure of enamel and dentine is inherited?

- A.** enamel pearls.
- B.** enamel erosions.
- C.** Hutchinson teeth.
- D.** dentinogenesis imperfecta.
- E.** Turner tooth.

Question nr **193**

Indicate true statements concerning the specificity in the course of inflammation of periapical tissues in deciduous dentition:

- 1) shorter roots of teeth impede spreading the inflammation to the maxillary bone;
- 2) dominance of compact over spongy substance creates good conditions for developing of the disease;
- 3) immaturity of the immune system in children favors infections;
- 4) widened by resorption apex facilitates diffusion of the inflammation to the maxillary bone.

The correct answer is:

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

Question nr **194**

Indicate the true statements concerning post-traumatic external inflammatory resorption:

- 1) the more immature the tooth is, the slower resorption is;
- 2) the more immature the tooth is, the faster resorption proceeds;
- 3) the course of the process is asymptomatic with pink discoloration of the tooth crown;
- 4) this process consists in resorption of root tissues and deposition of bone tissue in the places of resorptive sinuses;
- 5) during this process the toxins from the dentinal tubules diffuse to periodontium.

The correct answer is:

**A.** 2,4.

**B.** 2,5.

**C.** 2,3,4.

**D.** 1,3,4.

**E.** 1,3,5.

#### Question nr **195**

In a 6-year-old boy a few months ago pulp amputation in tooth 74 was performed using a  $\text{Ca(OH)}_2$  paste. Currently there is no pain, but the X-ray reveals an oval widening of the tooth chamber. The probable diagnosis is:

**A.** pulp polyp.

**B.** internal granuloma of the pulp.

**C.** pseudo dentinoma.

**D.** internal replacement resorption.

**E.** physiological resorption.

#### Question nr **196**

Hypodontia **does not** occur in:

- 1) ectodermal dysplasia;
- 2) cleidocranial dysplasia;
- 3) cleft lip or palate;
- 4) Pierre Robin syndrome;
- 5) Down syndrome.

The correct answer is:

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

Question nr **197**

Root canal treatment in a deciduous tooth might be performed in the case of:

- 1) incisor in a child under the age of 4½ years;
- 2) incisor in a child under the age of 5½ years;
- 3) canine in a child under the age of 7-8 years;
- 4) canine in a child over the age of 7-8 years;
- 5) any tooth in a child with hemophilia.

The correct answer is:

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

Question nr **198**

Which of the following root fractures has the best prognosis?

- A.** in vertical plane.
- B.** in oblique plane.
- C.** in horizontal plane, with a fracture line in cervical one-thirds of the root.
- D.** with displaced tooth fragments.
- E.** in horizontal plane, with a fracture line in apical one-thirds of the root.

Question nr **199**

Possible intraoral symptoms of physical violence include:

- 1) fracture of a tooth crown or avulsion;
- 2) lip injury;
- 3) frenulum laceration;
- 4) bruising or petechiae on the throat and the palate;
- 5) lesions in the so-called "safety triangle".

The correct answer is:

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

#### Question nr **200**

Which of the following are used in revascularization of immature permanent teeth?

- 1) calcium hydroxide;
- 2) MTA;
- 3) 5.25% NaOCl solution;
- 4) 0.5% NaOCl solution;
- 5) three-antibiotic paste;
- 6) antibiotic-corticosteroid paste.

The correct answer is:

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

#### Question nr **201**

Which of the following should be used for the final root canal obturation in the case of milk tooth pulpectomy?

- A.** zinc oxide with eugenol.

**B.** phosphoric acid cement.

**C.** glass-ionomer cement.

**D.** flow composite.

**E.** polymer material.

Question nr **202**

Patient aged 7 comes to the dental surgery. On clinical evaluation, in tooth 16 a deep lesion with pulp exposure was found. The mobility of the tooth was increased, there was oedema and sinus located in the root area.

Indicate the diagnosis and the optimal mode of treatment:

**A.** reversible pulpitis, method of treatment: pulpotomy and apexogenesis.

**B.** reversible pulpitis, method of treatment: pulpectomy and apexification.

**C.** irreversible pulpitis, method of treatment: pulpotomy and apexogenesis.

**D.** necrosis of the pulp, method of treatment: pulpotomy or pulpectomy and apexification.

**E.** necrosis of pulp, method of treatment: pulpectomy and apexification, or extraction.

Question nr **203**

The efficacy of remineralization of a subsurface cavity (white spot lesion) is denoted by:

1) no progression, e.g. no evolution into a cavity;

2) shining surface of the spot;

3) rough, white frosted surface of the spot;

4) "cicatrizization of tissue" seen under microscope;

5) microscopically seen full recovering of the hard tissue, i.e. total remineralization.

The correct answer is:

**A.** 1,2,4.

**B.** 1,3.

**C.** 1,5.

**D.** 1,3,4.

E. 1,2,5.

Question nr **204**

Dysfunctions and parafunctions are listed among the main environmental causes of malocclusion. Which of the following activities is a dysfunction?

- A. unwillingness to chew hard food.
- B. sucking a thumb.
- C. nail biting.
- D. gnashing of teeth.
- E. lip sucking.

Question nr **205**

Which of the following can be used in a quantified diagnosis of initial caries lesions?

- A. radiographs.
- B. FOTI (*Fibre-Optic Transillumination*).
- C. fluorescent radiation detector.
- D. magnifying glass or microscope.
- E. B and C are correct.

Question nr **206**

In a 5-year-old child, secondary caries around huge mesio-occlusal restoration in tooth 84 was found. On an x-ray an inflammatory change in the root furcation and an internal resorption lesion in one of the roots is found. The treatment of choice will be:

- A. leaving the tooth pulp chamber open till physiological exfoliation.
- B. formocresol pulpotomy.
- C. calcium hydroxide pulpotomy.
- D. extraction.
- E. pulpectomy.

Question nr **207**

In a 10-year-old patient avulsed tooth 21 was repositioned into the alveolar socket within 20 minutes after the trauma. After the next 30 minutes the patient came to the dental surgery. What kind of treatment should be undertaken?

- 1) extract the replanted tooth, control the alveolar socket and replant the tooth;
- 2) clinically and radiologically check the replanted tooth positioning;
- 3) immobilize the tooth with splinting for 2 weeks and administer antibiotic therapy;
- 4) start root canal treatment 7-10 days after the replantation;
- 5) pulp revascularization should be anticipated, so periodical tests of pulp vitality should be performed.

The correct answer is:

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

Question nr **208**

A behavioral method for reducing anxiety and fear is:

- A.** use of topical anesthetics.
- B.** general anesthesia.
- C.** oral sedation.
- D.** systematic desensitization.
- E.** use of local anesthesia.

Question nr **209**

In the case of milk tooth avulsion:

- A.** replantation is not indicated.



- B.** tooth should be replanted within an hour after the injury.
- C.** tooth should be replanted within two hours after the injury and then the teeth should be immobilized with the semi-rigid splint.
- D.** tooth should be replanted within two hours after the injury and then the teeth should be immobilized with the rigid splint.
- E.** tooth should be replanted within half an hour after the injury so the risk of external resorption is reduced.

Question nr **210**

Clindamycin is an antibiotic used in endocarditis prophylaxis in patients allergic to penicillin. It should be administered orally in a dose of:

- A.** 50 mg/kg body weight two hours before the surgery carrying a risk of bacteremia.
- B.** 50 mg/kg body weight one hour before the surgery carrying a risk of bacteremia.
- C.** 20 mg/kg body weight one hour before the surgery carrying a risk of bacteremia.
- D.** 20 mg/kg body weight two hours before the surgery carrying a risk of bacteremia.
- E.** none of the above.

Question nr **211**

Indicate the true statement concerning primary herpetic gingivostomatitis:

- A.** characteristic eruptions are intraepithelial bladders of fairly large sizes, which can be located on the palatal arches or palate, after ruptures they leave erosions with an inflammatory edge.
- B.** oral cavity lesions are pharyngitis, a unilateral swelling of the lymph nodes around the mandibular angle and an enlargement of the cervical lymph nodes, which are not very painful and flexible.
- C.** most often occurs in young children, follicles on the affected mucosa rupture and leave erosions with a tendency to merge, gingivitis occurs, the tongue is covered with a gray coating with vesicles and erosions at the edges; duration of the illness is 10-14 days.

**D.** on the reddened mucosa, punctate blue-white lesions are formed, surrounded by a halo of the reddened mucosa - so-called Koplik's spots that are located on the mucous membrane of the cheeks behind the molars.

**E.** mucosa of the entire oral cavity, especially the soft palate and palatal arches, is red, with the ulceration areas covered with a white-gray, thick, pseudomembranous coating, the tongue is usually coated.

#### Question nr **212**

Indicate the true statement on teeth development:

**A.** mineralization of milk teeth starts with the central upper incisors at the age of 2 months in the uterus.

**B.** mineralization of the first permanent molar teeth starts perinatally.

**C.** development of the roots in milk tooth lasts on average 2 years after the eruption.

**D.** development of the roots in permanent tooth lasts on average 2 years after the eruption.

**E.** none of the above.

#### Question nr **213**

A 4-year-old child has five conically shaped milk teeth. In a clinical investigation undeveloped jaws, lips inversion, scarce hairiness and dryness of skin were found. Seven developing germs of permanent teeth were detected by radiography. These symptoms are characteristic of:

**A.** cherubism.

**B.** ectodermal dysplasia.

**C.** cleidocranial dysplasia.

**D.** Capdepont disease.

**E.** odontodysplasia.

#### Question nr **214**

In a 5-year-old child in order to gain a long-term restoration of a three-surfaced caries lesion in a milk tooth after pulpotomy, one should use:

**A.** amalgam restoration reinforced by pins.

**B.** amalgam restoration.

**C.** glass-ionomer restoration.

**D.** contoured stainless steel crown.

**E.** composite restoration.

Question nr **215**

In immature teeth you will expect apexogenesis after the treatment with the following methods:

- 1) Cvek's pulpotomy;
- 2) direct pulp capping;
- 3) partial amputation;
- 4) total amputation;
- 5) vital pulpectomy.

The correct answer is:

**A.** 1,2.

**B.** 2,3,4.

**C.** 1,2,3,4.

**D.** 2,3,4,5.

**E.** all the above.

Question nr **216**

Indicate the true statement concerning defense capabilities of the pulp in deciduous teeth (not at the stage of root resorption) and newly erupted permanent teeth:

**A.** they are substantially lower comparing to the capabilities of teeth in adults - the less developed tooth the bigger its defense capabilities.

**B.** they are substantially bigger comparing to the capabilities of teeth in adults - the more developed tooth the bigger its defense capabilities.

**C.** they are substantially bigger comparing to the capabilities of teeth in adults - the less developed tooth the bigger its defense capabilities.

**D.** they are equal to the ones of the teeth in adults, as the immune system

compensates the impact of tooth immaturity.

**E.** they are equal to the ones of the teeth in adults - tooth maturity has no impact on the defense capabilities.

**Question nr 217**

An injured permanent tooth should be splinted for 2 weeks in the case of:

- 1) concussion;
- 2) extrusion;
- 3) avulsion;
- 4) fracture at the 1/3 of cervical root length;
- 5) fracture at the 1/3 of apical root length.

The correct answer is:

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

**Question nr 218**

The so called "transmission" of carious bacteria takes place intermittently and in a particular period of child's life that is called a "window of infectivity". There are two such "windows of infectivity". The second "window of infectivity" occurs between:

- A.** 6 and 12 month of life, most commonly at 10 month of life.
- B.** 19 and 31 month of life, most commonly at 26 month of life.
- C.** 5 and 6 year of life.
- D.** 6 and 12 year of life.
- E.** 10 and 13 year of life.

**Question nr 219**

Indicate true statements on primarily primary caries prevention:

- 1) its essence is to limit the number of pathogens in the oral cavity and their negative effect on tooth tissues;

- 2) it consists in the obstruction of colonization of the oral cavity by cariogenic bacteria and already starts in gestation period;
- 3) it consists in the restitution and maintaining balance in the presence of demineralization spots;
- 4) as a part of the postnatal primarily primary prevention, chewing gums containing xylitol by mother is recommended;
- 5) treatment of early childhood caries (ECC) is a part of primarily primary prevention.

The correct answer is:

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

#### Question nr **220**

What type of lesion is the localized hypoplasia of enamel?

- A.** quantitative.
- B.** qualitative.
- C.** hereditary.
- D.** teratogenic.
- E.** backbone.

#### Question nr **221**

Indicate the true statements concerning dental trauma:

- 1) just after a dental trauma one should not additionally damage periodontal ligaments of the tooth by checking its reaction to tapping;
- 2) radiologically diagnosed lateral luxation or intrusion can be confirmed by tapping;
- 3) in the case of tooth injury, the pulp reaction to stimuli can be normal even in 3 months after the injury;
- 4) pink discoloration of a tooth after trauma can be a result of extravasation of blood to the pulp;
- 5) in a young, immature tooth a delayed treatment after trauma cannot be the cause of pulp necrosis if there is no actual exposure of the pulp.

The correct answer is:

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

Question nr **222**

During the preparation of a caries lesion in the asymptomatic tooth 75 in a 5-year-old child, it came to dental pulp exposure. In a presented case the treatment of choice will be:

- A.** direct pulp capping with a non-setting calcium hydroxide paste.
- B.** direct pulp capping with a hard setting calcium hydroxide paste.
- C.** direct pulp capping with MTA.
- D.** pulpotomy.
- E.** pulpectomy.

Question nr **223**

So-called "critical pH", by which the fluoroapatite is dissolving, is estimated at:

- A.**  $\leq 4.5$ .
- B.**  $\leq 5.0$ .
- C.**  $\leq 5.5$ .
- D.**  $\leq 6.0$ .
- E.**  $\leq 6.5$ .

Question nr **224**

Combine the following gum and periodontal diseases with the appropriate description:

disease:

- a) severe neutropenia;
- b) hypophosphatasia;
- c) aggressive periodontitis;
- d) ANUG.

description:

- 1) sores or necrosis of interdental papillae covered with a white-gray coating, leaving permanent traces with a linear edge of the gum;
- 2) fast loss of connective tissue and bones (> 2 mm in 3 months) with a small amount of bacterial plaque, with formation of deep periodontal pockets;
- 3) progressive periodontal destruction, painful sores of the oral mucosa that leave scars after healing;
- 4) premature loss of roots of deciduous teeth with no signs of resorption.

The correct answer is:

- A.** a3,b4,c2,d1.
- B.** a2,b3,c1,d4.
- C.** a4,b3,c2,d1.
- D.** a2,b3,c4,d1.
- E.** a1,b4,c2,d3.

#### Question nr 225

Indicate the true statements concerning early childhood caries (ECC):

- 1) this is the early stage of caries characteristic of young children;
- 2) any sign of caries on smooth surfaces is classified as a severe form in children under the age of 3;
- 3) at the age of 4 severe form of ECC is when carious lesions are on at least three surfaces;
- 4) transmission of cariogenic bacteria occurs in a non-continuous manner;
- 5) the first window of infectivity is between the 5<sup>th</sup> and 10<sup>th</sup> month of a child's life;
- 6) the first window of infectivity is between the 19<sup>th</sup> and 31<sup>st</sup> month of a child's life.

The correct answer is:

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

D. 1,3,5.

E. 3,4,6.

Question nr **226**

For a child weighing 20 kg, the probable lethal dose of fluoride will be:

A. 15 mg.

B. 30 mg.

C. 150 mg.

D. 300 mg.

E. 450 mg.

Question nr **227**

Indicate the **false** statements concerning double teeth:

A. they are teeth which root surfaces are partly or completely connected by cementum, with separate crowns, pulp chambers and root canals.

B. they can have two separate pulp chambers and separate root canals, joint wide pulp chamber and one root canal, or joint pulp chamber and separate root canals.

C. they have one joint root with one root canal and one joint crown with a visible groove on the buccal surface and a joint pulp chamber.

D. they can be present in each part of the dental arch, but most often in the region of lower incisors.

E. they occur more often in permanent than in milk dentition.

Question nr **228**

Which of the following concerning immature permanent tooth pulp are true?

1) is characterized by rich vascularisation and hydration;

2) contains a small amount of cell elements;

3) has a small amount of fibrous elements;

4) is characterized by greater reactivity to stimuli;

5) is characterized by low odontoblast activity.

The correct answer is:



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

Question nr **229**

Indicate **the false** statements concerning taurodontism:

- 1) is characterized by an elongated trunk of the crown with no cervical constriction and short roots;
- 2) is characterized by extended tooth roots;
- 3) occurs only in first permanent molars;
- 4) occurs as a result of the accelerated, horizontal intussusception of Hertwig epithelial sheath;
- 5) occurs as a result of the delayed, horizontal intussusception of Hertwig epithelial sheath.

The correct answer is:

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

Question nr **230**

Find true sentences on formocresol:

- 1) it is used in pulpotomy and pulpectomy in primary teeth;
- 2) it is used to mummify all the residual pulpal tissue in the root canal;
- 3) it creates a superficial layer of fixation, while preserving the vitality of the deeper radicular pulp;
- 4) should not be applied directly on a bleeding pulpal tissue;
- 5) using formocresol in dentistry exceeds its current permitted exposure limits.

The correct answer is:

- A. 1,5.

**B. 2,4.**

**C. 3,4.**

**D. 2,5.**

**E. 1,2.**

**Question nr 231**

Indicate true sentences on early childhood caries (ECC) caused by inadequate bottle feeding:

- 1) changes first appear on incisors in both: the maxilla and mandible, due to their early time of eruption;
- 2) later, caries lesions appear on posterior teeth, first molars in both: the maxilla and mandible;
- 3) canines are afflicted with caries more often than first molars because of their earlier time of eruption;
- 4) same scheme of caries development may appear in cases of demanded prolonged breast feeding;
- 5) decreased salivary flow at night and reduced saliva buffer capacity have an impact on bottle caries development.

The correct answer is:

**A. 1,3,4,5.**

**B. 2,3,4,5.**

**C. 2,4,5.**

**D. 1,2,3.**

**E. all of above.**

**Question nr 232**

Indicate the true statements on the treatment provided in the case of a replanted tooth with the mature (closed) root apex:

- 1) root canal treatment should be performed in all avulsed teeth, regardless the time of avulsion and the kind of medium the tooth was kept in before replantation;
- 2) root canal treatment should be started before the removal of the splint from the teeth;
- 3) root canal treatment should be performed "in hand", outside the alveolar socket, before replanting the tooth;
- 4) root canal treatment should be performed in the case of the necrosis of

the pulp;

5) root canal treatment should be delayed because pulp revascularization can occur.

The correct answer is:

**A.** only 1.

**B.** 1,2.

**C.** 1,3.

**D.** 4,5.

**E.** only 4.

#### Question nr **233**

Capdepont teeth:

1) are related to abnormal dentine structure;

2) are a type of dentin dysplasia;

3) are synonym for dentinogenesis imperfecta;

4) are called hereditary opalescent dentin;

5) are a type of odontodysplasia.

The correct answer is:

**A.** 1,2,3.

**B.** 1,3,4.

**C.** 3,4,5.

**D.** 1,2,4.

**E.** 2,4,5.

#### Question nr **234**

The Preventive Resin Restoration (PRR) type I method is based on:

**A.** sealing the fissures with glass-ionomer materials.

**B.** sealing the fissures with flow composite.

**C.** sealing the fissures preceded by enameloplasty procedures.

**D.** sealing the fissures preceded by enameloplasty procedures and a removal of small caries lesions within dentine.

E. restoring small caries lesions with glass-ionomer material.

Question nr **235**

A healthy 7-year-old boy reported to the doctor who diagnosed pulp exposure in tooth 55 with no reaction to vitality tests, but the crown of the tooth was preserved in good condition. On the X-ray picture there is no sign of root resorption nor the presence of the germ of tooth 15. The most appropriate treatment method is:

- A. vital pulpotomy.
- B. Cvek's pulpotomy.
- C. mortal pulpotomy.
- D. pulpectomy.
- E. extraction.

Question nr **236**

Which genetic syndromes does the tooth agenesis occur in?

- 1) ectodermal dysplasia;
- 2) Down's syndrome;
- 3) Ellis-van Creveld syndrome;
- 4) Gardner syndrome;
- 5) Marfan syndrome;
- 6) cerebral-cranial dysplasia.

The correct answer is:

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

Question nr **237**

The fast progression of caries in milk teeth, comparing with permanent teeth, is due to:

- 1) twofold thinner layer of enamel in milk teeth;

- 2) bigger diameter of enamel prisms;
- 3) smaller content of mineral components in the enamel;
- 4) small number of interglobular spaces in the dentine;
- 5) smaller percentage of pits in the enamel;
- 6) double-layered structure of the enamel.

The correct answer is:

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

Question nr **238**

Pain as a reaction to tooth tapping in horizontal and vertical directions, in the case of a tooth after trauma may indicate:

- A.** exposure of the pulp.
- B.** damage to the dental ligaments.
- C.** enamel-dentine fracture of the tooth crown.
- D.** fracture of enamel covering the crown.
- E.** A and C are true.

Question nr **239**

The obliteration of dental cavities, teeth discolored to amber with opalescence, bell-shaped crowns, short and narrow roots, loss of enamel after tooth eruption reveals soft dentin - these are typical symptoms of:

- A.** amelogenesis imperfecta.
- B.** Capdepont disease.
- C.** enamel hypoplasia of antibiotic origin.
- D.** hyperbilirubinemia.
- E.** vitamin D-resistant rickets.

Question nr **240**

Class V by Ellis, the classification of dental trauma, embraces:

- A.** fracture of the crown in the cervical area.
- B.** avulsion.
- C.** luxation.
- D.** fracture of the root.
- E.** injury that leads to the pulp necrosis with the tooth crown being fractured or not.

Question nr **241**

A traditional method of partial amputation of dental pulp is based on cutting the pulp at the:

- A.** level of canal entrances.
- B.** depth of 2 mm.
- C.** depth of  $2/3$  of the crown length.
- D.** apex.
- E.** half of the root length.

Question nr **242**

“It presents as a qualitative change in enamel that, initially, is of normal thickness, ranging from localized opacity, through opacity with discoloration and obvious poor quality to posteruptive enamel breakdown. One or more first permanent molars may be affected together with effects on one or more incisors”. The description above refers to:

- A.** dentinal dysplasia.
- B.** amelogenesis imperfecta.
- C.** molar-incisor hypomineralization.
- D.** dentinogenesis imperfecta.
- E.** X-linked vitamin D-resistant rickets.

Question nr 243

Inflammatory internal resorption:

- 1) is also known as internal granulomatosis;
- 2) is also known as proliferative pulpitis;
- 3) is often seen in milk teeth treated by direct pulp capping or pulpotomy using calcium hydroxide paste;
- 4) is often observed in milk teeth treated by direct pulp capping or pulpotomy using formocresol;
- 5) progress asymptotically.

The correct answer is:

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

Question nr 244

Match the intrinsic discolouration with its causative factor.

The correct answer is:

- | <u>discoloration</u>                | <u>cause</u>                          |
|-------------------------------------|---------------------------------------|
| 1) yellow-brown to dark yellow;     | a) <u>dentinogenesis imperfecta</u> ; |
| 2) green-blue;                      | b) <u>congenital porphyria</u> ;      |
| 3) <u>blue-brown (opalescent)</u> ; | c) <u>amelogenesis imperfecta</u> ;   |
| 4) <u>red-brown</u> ;               | d) <u>hyperbilirubinemia</u> .        |

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

Question nr 245

Indicate the true statement concerning the pulp:

- A.** it shows the innervation consisted of vegetative nerve fibers and two types of sensory nerves.
- B.** is characterized by the well-developed lymphatic system.
- C.** 'A' fibers are characterized by high sensitivity threshold and slow conducting, they respond to mechanical, thermal and chemical stimuli.
- D.** 'C' fibers are characterized by low sensitivity threshold and fast conducting, they respond to stimuli which cause a dull, prolonged, difficult to localize pain.
- E.** due to the pulp specific kind of neurotransmitter, vegetative fibers do not show vasomotor effect.

Question nr **246**

The especially recommended technique of root canal obturation, following the apexification procedure is:

- A.** single cone obturation.
- B.** filling the root canal with resin based filler.
- C.** lateral condensation method.
- D.** thermoplasticized gutta-percha injection.
- E.** filling the root canal with triple antibiotic paste.

Question nr **247**

Which of the following is recommended for the final filling of the canal in the apexification method using MTA?

- A.** calcium hydroxide.
- B.** zinc oxide-eugenol cement.
- C.** iodoform paste.
- D.** gutta-percha with thermal technique.
- E.** gutta percha by lateral condensation.

Question nr **248**



The therapeutic agent used in primary teeth pulpotomy with **the smallest success rate** is:

- A. formocresol.
- B. ferric sulfate.
- C. electrosurgery.
- D. MTA.
- E. calcium hydroxide.

Question nr **249**

The Carabelli cusp (trait) is caused by a developmental disturbance during the stage of:

- A. histologic differentiation.
- B. morphologic differentiation.
- C. matrix formation.
- D. calcification.
- E. A and B are correct.

Question nr **250**

Tooth buds of which teeth start to develop after the birth?

- A. all permanent teeth.
- B. all permanent and some deciduous teeth.
- C. all permanent premolars and molars.
- D. all permanent molars.
- E. second and third permanent molars.

Question nr **251**

Indicate the true statement concerning true hyperdontia:

- A. it is an increased number of erupted milk teeth - above 20 or the permanent ones - above 32.

- B.** may occasionally be caused by the presence of persistent milk teeth.
- C.** teeth in the case of true hyperdontia are always misshaped.
- D.** incidence of true hyperdontia in permanent dentition is estimated at 5.8-8.9%.
- E.** A, C and D are true.

Question nr **252**

In the case of an avulsed tooth with an open apex, which was kept outside the mouth in saline for less than 60 minutes, one should:

- 1) immerse the tooth in a minocycline solution for 5 minutes;
- 2) immerse the tooth in a 2% solution of sodium fluoride for 20 minutes;
- 3) immobilize the tooth for a period of 2 weeks with elastic splint;
- 4) immobilize the tooth for a period of 4 weeks with elastic splint;
- 5) perform the root canal treatment after 7 days since the replantation.

The correct answer is:

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

Question nr **253**

The horizontal fracture in  $\frac{1}{2}$  length of the root of tooth 22 in a 14-year-old patient was the result of craniofacial injury. The tooth was immobilized and its state controlled. After 6 months, pulp necrosis was diagnosed in the coronal fragment of the tooth. The treatment of choice will be:

- A.** root canal treatment to the line of the fracture.
- B.** root canal treatment of both fragments of the root, and joining them with a metal pin.
- C.** root canal treatment to the line of the fracture and a surgical removal of the apical part of the root.
- D.** root canal treatment of the coronal fragment and stabilizing the tooth with

a metal point replacing the extracted apical part of the root.

**E.** observation, and treatment when the radiological changes appear.

Question nr **254**

In the course of which general disorder a treatment of deciduous tooth pulp rather than extraction is recommended:

- A.** uncontrolled diabetes.
- B.** Christmas disease.
- C.** immunosuppressive treatment.
- D.** congenital heart disease.
- E.** healing disorders.

Question nr **255**

Blue sclera, progressive hearing loss, bone fragility and dental defects are observed in:

- A.** osteogenesis imperfecta.
- B.** dentinogenesis imperfecta.
- C.** vitamin D-resistant rickets.
- D.** syphilis.
- E.** hyperphosphatemia.

Question nr **256**

If there are specific indications for its use, a toothpaste that contains 5000 ppm of fluoride may be used in a child at the age not less than:

- A.** 10 years.
- B.** 12 years.
- C.** 13 years.
- D.** 14 years.
- E.** 16 years.

Question nr **257**

Indicate the true sentence on glass-ionomer cement used as fissure sealant:

- A.** is used in children with a high risk of caries as temporary fissure sealant in partially erupted teeth.
- B.** provides a long term protection against caries in fully erupted teeth.
- C.** substitutes topical fluoride application on adjacent teeth because of the long-term release of high amounts of fluoride into the oral cavity.
- D.** shows the same kind of retention as composite material.
- E.** A, B, D are correct.

Question nr **258**

The important caries risk factors in the first permanent molars are the anatomy of the fissures and the time of tooth eruption. Find which of the fissures on the occlusal surface given below are deep and tend to accumulate difficult-to-saliva clean dental plaque, and reduce the effectiveness of brushing, which increase caries risk in the first permanent molars:

- A.** V, U, IK.
- B.** V, U, I.
- C.** U, IK, reversed Y.
- D.** U, I, reversed Y.
- E.** I, IK, reversed Y.

Question nr **259**

Diaphanoscopy can be used to diagnose:

- 1) decay on approximal surfaces;
- 2) enamel cracks;
- 3) ankylosis;
- 4) vascular flow;
- 5) pulp vitality.

The correct answer is:

- A.** 1,2.

**B.** 2,3.

**C.** 3,4.

**D.** 4,5.

**E.** 1,5.

Question nr **260**

A 5-year-old child has 6 small conical milk teeth. The child has also maxillary hypoplasia, eversion of the lips, fine sparse hair and dry skin. On the radiograph only 6 developing, permanent teeth can be seen. The symptoms are characteristic of:

**A.** cherubism.

**B.** ectodermal dysplasia.

**C.** cleidocranial dysplasia.

**D.** Capdepont's disease.

**E.** odontodysplasia.

Question nr **261**

Which of the following sentences on medicaments used in intravital pulpotomy of a primary tooth is true?

**A.** because of its proved high effectiveness calcium hydroxide cementum is advised as a first choice medicament.

**B.** formocresol should be applied directly on the bleeding pulp to ensure hemostasis.

**C.** ferric sulfate should be applied on radicular pulp stumps for 15 seconds.

**D.** nowadays, the use of formocresol is not advised as it exceeds current permitted exposure limits.

**E.** nowadays, the use of calcium sulfate followed by iodoform paste burnished onto pulp stumps is highly recommended.

Question nr **262**

Disturbances in the differentiation of the formative cells of enamel caused by an infection of primary teeth, which is placed in the root bifurcation, may lead to a developmental defect of the outer layer of enamel in the permanent successor. Such a state is described as:

- A.** Hutchinson teeth.
- B.** Pflüger teeth.
- C.** Turner teeth.
- D.** Ellis-van Creveld syndrome.
- E.** Capdepont's disease.

Question nr **263**

The time from the appearance of a part of the tooth crown in the mouth to its gaining a contact with the opposing tooth is:

- A.** for permanent first molars 12-18 months, and for premolars 1-2 months.
- B.** for permanent first molars 1-2 months, and for premolars 12-18 months.
- C.** for permanent first molars and premolars 12-18 months.
- D.** for permanent first molars and premolars 1-2 months.
- E.** for permanent first molars 4 months, and for premolars 5 months.

Question nr **264**

Find the indications for pulpotomy in primary teeth:

- 1) caries pulp exposure;
- 2) restorable tooth;
- 3) inflammation of radicular pulp;
- 4) no pain or a mild transient pain;
- 5) furcation periapical pathology found on X-ray.

The correct answer is:

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

**E. 1,3,5.**

**Question nr 265**

Indicate the true statements concerning the birth line (neonatal line):

- 1) Ebner line is created in the perinatal period;
- 2) it occurs in all milk and permanent teeth;
- 3) it occurs only in milk teeth;
- 4) it occurs only in enamel;
- 5) it occurs in enamel and dentin.

The correct answer is:

**A. 1,2,5.**

**B. 1,3,5.**

**C. 2,4.**

**D. 3,5.**

**E. 1,5.**

**Question nr 266**

The significant caries index is used for:

**A. caries risk assessment.**

**B. caries susceptibility analysis.**

**C. selecting a group of children with a high frequency of caries from the study population.**

**D. assessment of tooth decay in the study group in relation to 1/3 of the number of examined people in a given population.**

**E. determination of the mean DMFT in a given population of 1/3 of the subjects with the largest number of teeth affected by caries.**

**Question nr 267**

The root canal treatment of milk tooth should be considered in the case of:

- 1) hemophilia or other disorders of hemostasis;
- 2) presence of maximum four molars with advanced caries, needing pulp therapy;
- 3) patients with hereditary angioedema;

4) neglect of good oral hygiene;

5) crowding of milk teeth.

The correct answer is:

**A.** 1,3,5.

**B.** 2,3,4.

**C.** 1,2,4.

**D.** 2,3,5.

**E.** 1,4,5.

Question nr **268**

Which of the following belong to the clinical image of the lateral luxation of a permanent tooth?

1) tooth is displaced in the labial or palatal / lingual direction;

2) tooth is displaced axially;

3) the percussion test reveals the ankylotic sound;

4) lack of tooth mobility is found;

5) there is increased mobility of the tooth.

The correct answer is:

**A.** 2,4.

**B.** 2,3,5.

**C.** 2,3,4.

**D.** 1,3,4.

**E.** 1,3,5.

Question nr **269**

The presence of many supernumerary, impacted and retarded teeth and delayed eruption of teeth are characteristic of:

**A.** cleidocranial dysplasia.

**B.** Ellis-van Creveld syndrome.

**C.** odontodysplasia.

**D.** Down syndrome.



E. dentinal dysplasia.

Question nr **270**

Which of the following are characteristic of amelogenesis imperfecta associated with enamel hypomineralization:

- 1) changed crown shape;
- 2) correct crown shape just after eruption;
- 3) rough enamel with numerous wells, grooves;
- 4) milky white or light brown, matt, soft enamel of 'cheese' or chalk consistency;
- 5) irregular outline of enamel, the tooth cavity widened on X-ray image;
- 6) enamel layer of normal thickness, normal tooth cavity on X-ray image.

The correct answer is:

**A.** 1,3,5.

**B.** 1,4,5.

**C.** 1,4,6.

**D.** 2,3,5.

**E.** 2,4,6.

Question nr **271**

A dominant factor predisposing to dental trauma is:

**A.** class 1 by Angle's classification.

**B.** class 2, type 1 by Angle's classification.

**C.** class 2, type 2 by Angle's classification.

**D.** class 3 by Angle's classification.

**E.** none of the above.

Question nr **272**

In a 14-year-old child an enamel-covered tubercle projecting from the occlusal surface of both lower premolar teeth was found. On an x-ray the evidence of a pulp tissue within the tubercle was found. This abnormality is called:

**A.** dens invaginatus.

**B.** dens in dente.

**C.** dens evaginatus.

**D.** Carabelli trait.

**E.** cingulum cusp.

Question nr **273**

There is localized hypoplasia of the enamel on the crowns of some teeth, the teeth are erupting slowly and on an x-ray they have a “ghost appearance”.

Indicate the probable diagnosis:

**A.** melanodontia.

**B.** *amelogenesis imperfecta*.

**C.** vitamin D-resistant rickets.

**D.** regional odontodysplasia.

**E.** dentine and enamel dysplasia.

Question nr **274**

Early childhood caries (ECC) is defined as:

- 1) caries of the deciduous teeth occurring only in children up to 3 years of age;
- 2) dental caries present in children before the age of six;
- 3) early stage of caries in children;
- 4) caries before the cavity is formed and which has the undermining feature;
- 5) milk tooth caries of multifactorial aetiology;
- 6) bottle caries, because it results mainly from an incorrect feeding method.

The correct answer is:

**A.** 1,3,6.

**B.** 1,4,6.

**C.** 2,3.

**D.** 2,4,5.

**E.** 2,5.

Question nr **275**

“Systemic desensitization” is a term that describes:

- A.** process of the mummification of radicular pulp in a tooth during formocresol amputation.
- B.** gradual desensitization of inflamed pulp by the use of antibiotic-steroidal paste.
- C.** behavioral method for reducing anxiety.
- D.** gradual loss of consciousness (stage in general anesthesia).
- E.** preemptive analgesia.

Question nr **276**

In the case of the subluxation of a permanent tooth, the following are observed:

- 1) the tooth is mobile and dislocated;
- 2) the tooth is displaced, but not moving;
- 3) possible bleeding from the gingival sulcus;
- 4) sensitivity to percussion;
- 5) negative periodontal reaction to percussion.

The correct answer is:

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

Question nr **277**

In the case of cervical root fracture, the splinting of teeth should be kept for:

- A.** 2 weeks.
- B.** 4 weeks.
- C.** 8 weeks.

D. 3 months.

E. 4 months.

Question nr **278**

“The condition presents as creamy-yellow or yellow-brown opacities clearly demarcated from the intact enamel, localized on the incisal edges of incisors and on the occlusal surfaces of molar teeth. The condition is accompanied by a discomfort during toothbrushing and oversensitivity of teeth”. That is a description of:

A. odontodysplasia.

B. dentinogenesis imperfecta.

C. rampant caries.

D. amelogenesis imperfecta.

E. MIH.

Question nr **279**

Which of the following has **the lowest** success rate in vital pulpotomy in deciduous teeth?

A. formocresol.

B. ferric sulfate.

C. mineral trioxide aggregate.

D. calcium hydroxide.

E. none, as all of the above have a similar success rate.

Question nr **280**

The pulp of a permanent tooth with undeveloped root is characterized by:

- 1) large volume in relation to the thickness of mineralized tissues;
- 2) high number of fibrous elements, irregularly arranged;
- 3) high activity of cylindrical odontoblasts arranged in one layer;
- 4) frequent occurrence of Weil layer;
- 5) few unmyelinated ‘C’ fibers and a big number of myelinated fibers.

The correct answer is:

**A.** 1,2,3,5.

**B.** 1,3.

**C.** 1,2,3,4.

**D.** 3,4.

**E.** 3,5.

**Question nr 281**

In which genetically determined syndromes does oligodontia occur?

- 1) ectodermal dysplasia;
- 2) cleidocranial dysostosis;
- 3) Down's syndrome;
- 4) Pierre Robin's syndrome;
- 5) Plummer-Vinson's syndrome;
- 6) Job's syndrome.

The correct answer is:

**A.** 1,3,4.

**B.** 1,2,4.

**C.** 1,2,3.

**D.** 3,4,5.

**E.** all the above.

**Question nr 282**

Supernumerary teeth can be found in:

**A.** Down syndrome.

**B.** cleidocranial dysplasia.

**C.** ectodermal dysplasia.

**D.** cherubism.

**E.** B and C are correct.

**Question nr 283**

A 14-year-old child has enamel hypoplasia on the labial surface of tooth 11. It covers a small area and the remaining teeth are free from the changes. During an interview it was found that at the age of 4 the child fractured the crown of tooth 51. The fractured tooth had never been treated. A probable diagnosis will be:

- A.** enamel hypoplasia caused by a general disease.
- B.** fluorosis.
- C.** Turner tooth.
- D.** *amelogenesis imperfecta*.
- E.** melanodontia.

Question nr **284**

An endodontic therapy of milk teeth, rather than extraction, is advised in patients with:

- A.** hemostasis disorders.
- B.** congenital heart disease.
- C.** diabetes mellitus.
- D.** renal disorders.
- E.** all of the above.

Question nr **285**

The most common type of injury to the milk teeth is:

- A.** fracture of crown of front teeth.
- B.** fracture of crown of upper incisors in protrusion.
- C.** fracture of crown of central upper incisors.
- D.** tooth luxation.
- E.** fractures of roots of upper incisors with dislocation of fractured piece.

Question nr **286**

Toothpastes with a high level of fluoride in patients in good general health

should be used:

- A. once a day within one month, teeth should be brushed for 3 minutes.
- B. once a day within 2-4 months, teeth should be brushed for 1 minute.
- C. twice a day within 2-4 months, teeth should be brushed for 3 minutes.
- D. twice a day within 3-6 months, teeth should be brushed for 1 minute.
- E. twice a day within one year, teeth should be brushed for 1 minute.

Question nr **287**

„Damage of supporting structures of a milk tooth leading to the increased mobility of the tooth and pain on tapping, without dislocation of tooth, with bleeding from gingival sulcus seen just after the trauma”. It is a description of:

- A. tooth concussion.
- B. tooth subluxation.
- C. tooth elongation.
- D. tooth lateral luxation.
- E. tooth avulsion.

Question nr **288**

Lethal Dose (LD) of fluoride is estimated as:

- A. 1 mg F/kg bw.
- B. 5 mg F/kg bw.
- C. 10 mg F/kg bw.
- D. 14-28 mg F/kg bw.
- E. 32-64 mg F/kg bw.

Question nr **289**

„State in which teeth have bell-shaped crowns with weakly marked neck cervix, amber color and tooth wear. Roots are short, thin and narrow, the pulp chamber and root canals are obliterated. The symptoms are more

visible in milk than in permanent dentition". This is a description of:

- A. amelogenesis imperfecta.
- B. dentinal dysplasia.
- C. regional odontodysplasia.
- D. dentinogenesis imperfecta.
- E. total hypoplasia.

Question nr **290**

If the bleeding after the pulp amputation of a milk tooth can not be arrested during 3-4 minutes, it is indicated to:

- 1) extirpate the pulp;
- 2) extract the tooth;
- 3) prolong the time of inhibition of bleeding;
- 4) use a coagulation device;
- 5) make a direct pulp capping.

The correct answer is:

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

Question nr **291**

Indicate the **false** statement on the materials used for a final obturation of root canals in milk teeth:

- A. should not contain contrast agents.
- B. should be easily resorbed.
- C. should have antibacterial properties.
- D. should easily flow into the root canal.
- E. should not be irritating to or cause inflammatory reaction of permanent



tooth germs.

Question nr **292**

Which of mentioned below **does not** have antibacterial properties against cariogenic bacteria?

- 1) chlorhexidine;
- 2) fluoride compounds;
- 3) povidone iodine;
- 4) fructose;
- 5) birch sugar.

The correct answer is:

**A.** 1,2,3.

**B.** 3,4.

**C.** only 4.

**D.** 4,5.

**E.** only 5.

Question nr **293**

In case of permanent teeth with incomplete root formation, the pain sensitivity during the preparation of cavity is smaller because of:

- 1) underdeveloped Rashkov plexus;
- 2) perikymata;
- 3) large number of interglobular spaces;
- 4) immaturity of nervous tissue;
- 5) low degree of mineralisation;
- 6) lots of interprismatic substance.

The correct answer is:

**A.** 1,2,6.

**B.** 1,4.

**C.** 2,3.

**D.** 2,4.

**E.** 3,5.

Question nr **294**

The effect of direct acting of ionizing rays on germ of permanent tooth may embrace:

- A.** enlargement of tooth dimensions.
- B.** cynodontia.
- C.** shortage or lack of tooth root.
- D.** fusion with the adjacent tooth germ.
- E.** taurodontism.

Question nr **295**

Enlargement and bleeding of gingiva can be the symptoms of:

- A.** Crohn disease.
- B.** Down syndrome.
- C.** leukemia.
- D.** bisphosphonate therapy.
- E.** true are C, D.

Question nr **296**

Find true sentence on the extraction of a tooth in a patient after the radiotherapy of head or neck:

- A.** the antibiotic cover is always required, regardless the time that passed since the termination of radiotherapy.
- B.** administration of antibiotic is necessary only in the first year after the cessation of radiotherapy.
- C.** dental local anesthesia should be performed with the vasoconstrictor agent, to ensure hemostasis.
- D.** the extraction of a tooth can be performed in a patient during the radiotherapy in time of so called " therapeutic window".
- E.** true are B,D.

Question nr **297**

The effects of anticancer treatment in childhood may embrace:

- 1) decrease of salivary flow;
- 2) tendency to tooth caries;
- 3) presence of supernumerary teeth;
- 4) rhizomegaly;
- 5) hypoplasia of enamel in permanent teeth.

The correct answer is:

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

Question nr **298**

Taurodontic teeth should be differentiated with teeth with enlarged pulp chambers that can be present in:

- 1) regional odontodysplasia;
- 2) vitamin D resistant rickets;
- 3) Mc Cune-Albright syndrome;
- 4) hypophosphatasia;
- 5) vitamin D dependent rickets.

The correct answer is:

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

Question nr **299**

Isolated, hypoplastic defect of enamel on the labial surface of the permanent central incisor in maxilla is most probably caused by:

- A.** nutritional deficiencies.
- B.** hormonal disturbances.

- C. tetracycline intake.
- D. trauma to the milk central incisor in maxilla.
- E. epidermolysis bullosa hereditaria.

Question nr **300**

The amputation of pulp in milk teeth should be undertaken in a case of:

- 1) partial irreversible inflammation caused by carious pulp exposure;
- 2) deep cavity with a visible, plentiful bleeding from exposed pulp, that can be arrested with adrenalin;
- 3) pulp exposure in an incisor after trauma in 7 year old child who came to the dental surgery at the day of trauma;
- 4) pulp exposure in an incisor after trauma in 4 year old child who had an tooth injury one day earlier;
- 5) pulp exposure during the cavity preparation in a tooth that was not a cause of pain;
- 6) carious pulp exposure when the spontaneous pains in the past lasted only few days.

The correct answer is:

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

Question nr **301**

The dentist found a small intrusion of a central incisor in a 2-year-old child. Parents cannot tell when the injury happened. In the clinical investigation no inflammation in the area was found. The child did not let an x-ray to be made. In the situation you should:

- A. make a surgical repositioning and immobilizing of teeth.
- B. surgical repositioning should be postponed.
- C. make a surgical repositioning and advice a soft diet for a week.
- D. let the tooth to self-eruption.

E. make an extraction.

Question nr **302**

Indicate the symptoms of leukemia that could be found in oral cavity:

- 1) gingival overgrowth;
- 2) toothache without other clinical or radiological symptoms of tooth pathology;
- 3) paleness of oral mucous;
- 4) generalized erythema of oral mucous;
- 5) bruising of oral mucous.

The correct answer is:

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

Question nr **303**

Choose **false** statement regarding diagnostic imaging:

- A. basic diagnostic imaging methods of teeth trauma are periapical and occlusal X-rays.
- B. for basic evaluation of bone loss caused by inflammation of marginal periodontium bitewing x-ray should be performed.
- C. examination of choice in evaluation of chronic maxillary sinusitis is cone beam CT.
- D. actual range of carious lesions corresponds to the decalcification area visible on x-rays.
- E. in case of suspected craniofacial defects of soft tissue, examination of choice is MRI imaging.

Question nr **304**

5 y.o. patient reported due to a sustained trauma. Clinical examination of tooth 51 revealed its significant mobility and displacement. RVG imaging

showed root fracture. Indicate the diagnosis according to the Ellis classification:

- A.** Class VI.
- B.** Class VII.
- C.** Class VIII.
- D.** Class IX.
- E.** Class X.

**Question nr 305**

Choose correct statement regarding dens evaginatus:

- A.** it is characterized by additional tubercles in the shape of cusps on the buccal and palatal surfaces of the crowns, formed by enamel or enamel and dentine; pulp can be found within it.
- B.** if found in incisors, such tubercles are referred to as the Leong's tooth.
- C.** if found on the palatal surface of the first maxillary molar (rarely in second or third permanent molars), tubercles in the shape of cusps are referred to a Carabelli cusps.
- D.** it is characterized by presence of additional tubecules in the shape of cusps on occlusal surface of the crowns, formed by enamel or enamel and dentine; pulp cannot be found within it.
- E.** in case of permanent teeth with incomplete root formation, abrasion or fracture of a tubercule is an indication for sealing or composite restoration.

**Question nr 306**

Late complications after luxation of permanent teeth include:

- 1) inflammatory resorption;
- 2) resorption of the successor's tooth germ;
- 3) pulp necrosis;
- 4) obliteration of pulp chamber;
- 5) root dilaceration;
- 6) growth inhibition of the root;
- 7) tooth crown hypoplasia.

Correct answer is:

- A.** 1,3,5,7.

**B.** 1,3,4,6.

**C.** 2,3,5,7.

**D.** 1,2,4,5,7.

**E.** 3,4,5,6.

Question nr **307**

Choose **false** statement describing stripping as a method of caries treatment:

**A.** it is performed in permanent teeth, in children aged 7 y.o. and above.

**B.** the procedure is based on convergent preparation of interproximal surfaces with while maintaining the cervical part.

**C.** the procedure can be performed in children, in which during the teeth replacement no trema occurred.

**D.** prepared surfaces are covered with fluoride varnish and subjected to periodic monitoring.

**E.** the procedure facilitates self cleaning of the surfaces.

Question nr **308**

Which feature of deciduous dentition is characteristic of typical pattern of eruption?

**A.** lateral maxillary incisors erupt after the mandibular ones.

**B.** central maxillary incisors erupt before the mandibular ones.

**C.** maxillary canines erupt before the maxillary lateral incisors.

**D.** mandibular canines erupt before the first mandibular molars.

**E.** first maxillary molars erupt before the maxillary canines.

Question nr **309**

ICON is used in following cases of carious lesions:

1) white spots on the labial enamel surface in permanent teeth, when during probing there is a slight porosity of the enamel at the site of discoloration;

- 2) surpassing the enamel-dentine margin and extending to 1/3 of the external layer of dentine;
- 3) radiological classification E1, which means a demineralization extending to ½ thickness of enamel;
- 4) radiological classification E2, which means that the lesion covers full thickness of the enamel up to DEJ;
- 5) radiological classification D1; when demineralization covers all of the enamel and extends to 1/3 of the external layer of dentine.

Correct answer is:

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

#### Question nr **310**

Choose correct features typical for tooth concussion:

- 1) no increased mobility;
- 2) increased mobility;
- 3) pain during percussion;
- 4) no reaction to percussion;
- 5) no bleeding from the socket.

Correct answer is:

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

#### Question nr **311**

Clinical examination of a 6 y.o. child showed the following: all of the deciduous teeth present, carious cavities in 3 first deciduous molars, fillings in 2 second deciduous molars, including secondary caries in one of them. As for primary dentition, demineralization spot in tooth 26 and 36 was present. All other teeth were healthy. Decay index in this child amounts:



- A.** dmft=5, DMFT=0.
- B.** DMF/dmf=7.
- C.** dmft=5, DMFT=2.
- D.** DMFS=5.
- E.** dmft=3, DMFT=0.

Question nr **312**

Oedema, discoloration (from redness to dark purple), idiopathic bleeding, ecchymosis and proliferative lesions of gingiva observed in a 5-year-old child:

- A.** require referring the child to oncologist due to suspicion of leukaemia.
- B.** indicate long-term neglect in terms of hygiene and phenytoin administration.
- C.** suggest hereditary gingival fibromatosis.
- D.** are a symptom of puberty gingivitis.
- E.** are a first symptom of starting the cyclosporine A treatment in a child subjected to kidney transplant.

Question nr **313**

Short lasting provoked tooth pain, no reaction to tapping, increased reaction to cold, which ceases after the elimination of the trigger, are the symptoms of:

- A.** reversible pulpitis.
- B.** irreversible pulpitis.
- C.** pulp necrosis.
- D.** apical periodontitis.
- E.** submucosal abscess.

Question nr **314**

In case of subluxation, the etiological factor is injury:

- A.** working perpendicularly to the long axis of tooth.
- B.** working parallel to the long axis of tooth.
- C.** sustained as a result of crashing into an object with sharp edges.
- D.** iatrogenic, due to cavity preparation using high-speed drill without cooling.
- E.** none of the above.

**Question nr 315**

In a child with malignant disease, extraction of teeth with poor prognosis is performed:

- A.** 7 days before the start of chemotherapy at the latest.
- B.** 10 days before the start of chemotherapy at the latest.
- C.** 21 days before the start of chemotherapy at the latest.
- D.** at any time, with proper antibiotic prophylaxis.
- E.** not sooner than 3 months after the end of radiotherapy in the head and neck area.

**Question nr 316**

In patients in remission after head and neck area radiotherapy in case of surgery involving disruption of the tissue continuity, e.g. tooth extraction, there are indications for:

- A.** administering one dose of antibiotics (antibiotic prophylaxis) before the surgery, regardless of the time elapsed since the termination of treatment.
- B.** antibiotic prophylaxis before the surgery and continuation of therapy until the complete healing of the wound, regardless of the time elapsed since the termination of treatment.
- C.** administering one dose of antibiotics (antibiotic prophylaxis) before the surgery, if the time elapsed since the termination of treatment is at least 5 years.
- D.** antibiotic prophylaxis before the surgery and continuation of therapy until the complete healing of the wound, in the first 5 years since the termination

of treatment.

**E.** such patients should be managed the same as healthy ones.

Question nr **317**

High risk of caries in a 7-year-old boy can be assessed due to:

- 1) active carious lesions observed in mother/legal guardian;
- 2) the child is in need of special pediatric care (radiotherapy);
- 3) radiotherapy induced xerostomia;
- 4) carious spots observed on the labial surfaces of maxillary and mandibular teeth;
- 5) patient is using orthodontic braces.

**A.** all of the above.

**B.** 1,2,3,4.

**C.** 2,3,4,5.

**D.** 2,3,5.

**E.** 3,4.

Question nr **318**

Which of the below mentioned methods **does not** qualify as minimally invasive treatment of carious lesions?

**A.** sonic caries removal.

**B.** laser preparation.

**C.** abrasive preparation.

**D.** chemo-mechanical caries removal.

**E.** atraumatic restorative treatment by means of steel crowns seated in traditional manner.

Question nr **319**

Indicate **false** statement regarding the treatment of primary caries lesions by means of non-invasive methods:

**A.** ideal remineralization agent should not deliver excess amount of calcium ions.

- B.** application of agents with high concentration of F results in remineralization of deeper layers of carious lesions.
- C.** treatment of white spots by means of highly concentrated fluoride agents stops the development of carious lesions.
- D.** remineralization by means of highly concentrated fluorides hinders the penetration of calcium and phosphate ions into the lesion.
- E.** CPP-ACP compound slows down caries progression and leads to carious spot repair.

Question nr **320**

Indicate correct statement regarding preparations used in prevention of dental caries:

- A.** application of fluoride gel for 5 minutes daily is considered an effective method of caries prevention after radiotherapy.
- B.** second generation varnishes contain xylitol, arginine or chlorhexidine, apart from 5% NaF.
- C.** fluoride varnishes, manufactured according to the Recaldent technology may contain chlorhexidine or arginine and chlorhexidine.
- D.** 1000 ppm F fluoride varnishes are effective in dental caries prevention.
- E.** recaldent is a compound of casein phosphopeptide and tricalcium phosphate.