

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

## Part 2

### Pedodontology

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1. Precancerous conditions include:

- 1) dyskeratosis congenita;
- 2) Kawasaki disease;
- 3) Fanconi anemia;
- 4) epidermolysis bullosa simplex;
- 5) leukoplakia.

Correct answer is:

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

2. The most common malignant tumours of the head and neck area that appear during first three years of child's life include:

- 1) retinoblastoma;
- 2) ameloblastoma;
- 3) embryonal neuroblastoma;
- 4) ameloblastic fibroma;
- 5) rhabdomyosarcoma.

The correct answer is:

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

3. Which proliferative lesions may cause eruption disorders or even its complete halt?

- 1) ameloblastoma;
- 2) odontomas;
- 3) odontogenic myxoma;
- 4) cementoma;
- 5) ameloblastic fibroma;
- 6) giant cell tumor.

Correct answer is:

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

4. Two-digit teeth numbering system, in which the first digit determines the quadrant and the second is the tooth number, is called:

- A.** Zsigmondy's.
- B.** Palmer's.
- C.** Viohl's.
- D.** Parreidt's.
- E.** Haderup's.

5. Indicate true statements regarding the natal teeth:

- 1) they are most commonly supernumerary teeth;
- 2) when asymptomatic, it is recommended to leave them until the eruption of permanent teeth;
- 3) their extraction is recommended in the first 24 hours after birth in the presence concomitant inflammation of adjacent mucosa;
- 4) transition to bottle milk is recommended if they constitute an irritant to mother's nipple;
- 5) in case of excessive mobility, they are left for observation until the eruption of adjacent tooth and possibility for their fixation.

The correct answer is:

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

6. Choose correct statements regarding the MIH:

- 1) it is an example of developmental quantitative defect of enamel;
- 2) it concerns at least one central maxillary incisor and also often first permanent molars;
- 3) it manifests itself as symmetric creamy-yellow or yellow-brown opacities;
- 4) it predisposes to attrition;
- 5) when preparing a MIH tooth, anesthesia is not necessary due to such teeth being less potent to thermal triggers;
- 6) etiological factors are usually systemic in the first 3 years of child's life.

Correct answer is:

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

7. Choose correct statements regarding the fluoride gels:

- A. they are recommended in children under 6 y. o. with high caries risk.
- B. they are not recommended in children over 6 y. o. with moderate caries risk.
- C. they are not recommended in children under 6 y. o. with moderate caries risk.
- D. they are recommended twice a year in children over 6 y. o. with high caries risk.
- E. they are recommended four times a year in children over 6 y.o. with moderate caries risk.

Correct answer is:

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

8. Choose correct statements regarding the infraocclusion:

- 1) it indicates a process of the tooth gradually moving towards the occlusal plane;
- 2) it indicates a process of the tooth gradually moving away from the occlusal plane and submerging into the alveolus;
- 3) it concerns only the primary dentition;
- 4) it concerns most often the first primary molars;
- 5) no increase in mobility is observed;
- 6) treatment of choice is tooth extraction and subsequent orthodontic treatment.

Correct answer is:

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

9. Oral cavity lesions that are specific for Lesniowski-Crohn disease include:

- 1) calloused polypoid proliferative lesions located in the oral cavity vestibule and retromolar trigone;
- 2) deep, chronic ulcerations;
- 3) angular cheilitis;
- 4) glossitis;
- 5) lip cracking in the midline;
- 6) diffuse swelling of the lips, cheeks and gingiva;
- 7) hyperplastic areas of pathologic changed mucosa with fissures;
- 8) granulomatous cheilitis.

Correct answer is:

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

10. Indicate **false** statements regarding dental management in a patient with haemophilia:

- 1) teeth extractions should be performed in the shortest possible time following the administration of factor (up to 12 hours);
- 2) in case of multiple extractions planning, only 4 teeth can be extracted during one visit;
- 3) after the procedure, the patient should remain under 2-day hospital observation;
- 4) acetylsalicylic acid should not be used as a painkiller;
- 5) NSAIDs, paracetamol (acetaminophen) and cyclooxygenase-2 (COX-2) inhibitors are indicated.

The correct answer is:

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

**11.** Choose correct statements regarding the distinctive features of deciduous teeth caries:

- 1) rapid transition from initial to subsequent stages;
- 2) anterior maxillary teeth are usually not involved with caries;
- 3) constant, rapid development of carious process despite applied treatment;
- 4) predisposed places in the order of their occupancy are: palatal surfaces in the neck areas, anatomic cavities, approximal surfaces.

Correct answer is:

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

**12.** Assign vitality time maintenance of periodontal cells to the storage environment of the avulsed tooth:

- |                                   |        |
|-----------------------------------|--------|
| 1) saliva;                        | a) 1h  |
| 2) Hank's Balanced Salt Solution; | b) 2h  |
| 3) Physiological saline;          | c) 6h  |
| 4) Pasteurized milk;              | d) 24h |

Correct answer is:

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

**13.** Choose **false** statement regarding antibacterial effect of fluoride:

- A.** in the bacterial cell, fluoride inhibits the enolase and adenosine triphosphatase  
**B.** fluoride activity leads to increase in removal of hydrogen ions  
**C.** possible effect of fluoride activity is disturbing the adhesion of bacteria to tooth surface  
**D.** fluoride may influence the bacteria composition of plaque  
**E.** stable exposition to fluoride may lead to adaptation of certain bacteria strains to it.

**14.** Choose correct statements regarding the complex of casein phosphopeptide and amorphous calcium phosphate (CPP-ACP):

- 1) it has the ability of stabilization of calcium, phosphate and fluoride ions, which in amorphous complex form do not dissolve in water;
- 2) it bonds with tooth membrane, dental plaque, bacteria and hydroxyapatites, thus becoming a source of bioavailable calcium and phosphate ions;
- 3) creams containing this complex are contraindicated in patients with cow milk and benzoate allergy;
- 4) products containing CPP-ACP are contraindicated in pregnant women.

Correct answer is:

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

**15.** Which of the below mentioned oral cavity lesions are not considered as initial in the course of leukemia:

- A.** gingival hypertrophy.  
**B.** oral mucosa purpura.  
**C.** acute necrotizing ulcerative gingivitis.  
**D.** agranulocytic ulcerations.  
**E.** Mmucosa cyanosis.

**16.** MID strategy includes:

- 1) discovering early carious lesions but without assessing the individual risk;
- 2) caries control;
- 3) reduction of carious bacteria in order to eliminate the risk of further development;
- 4) lesion demineralization and development of tissue cavity; rather exchanging the filling than its repair; remineralization of enamel and dentin decalcification.

Correct answer is:

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

17. Choose correct statements characterizing the extrusion of primary tooth:

- 1) visually, the tooth is displaced into the alveolus;
- 2) visually, the tooth is elongated;
- 3) percussion test – pain to percussion;
- 4) percussion test – highly metallic sound (ankylosis);
- 5) increase in tooth mobility;
- 6) no tooth mobility.

Correct answer is:

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

18. Choose correct morphological features of enamel of immature teeth:

- 1) it is poorly mineralized;
- 2) it contains more hydroxyapatite rich in calcium and poor in carbon;
- 3) it possesses less calcified interprismatic substance;
- 4) change in enamel prism structure;
- 5) it possesses lower amount of water.

Correct answer is:

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

19. Macrodontia is observed in:

- 1) KBG syndrome;
- 2) hemifacial hypertrophy;
- 3) Russell-Silver syndrome;
- 4) Down syndrome;
- 5) Rabson-Mendenhall syndrome.

Correct answer is:

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

20. This method of dental age evaluation is based on evaluation of four reference teeth according to 12 radiographic stages for each tooth. Six relating to the crown formation and six relating to root formation. Above-mentioned method is called:

- A. Demirjian's.
- B. Willem's.
- C. Noll's.
- D. Gustafson and Koch's.
- E. Havvik's.

21. Choose correct statements regarding dentin mineralization:

- 1) its course begins immediately after matrix development;
- 2) its course is the same as in case of enamel mineralization;
- 3) at the beginning, the matrix' follicles are secreted by odontoblasts to the intercellular space;
- 4) the matrix' follicles constitute the nucleation core of hydroxyapatites and give rise to many mineralization foci;
- 5) globular pattern of calcification takes place in mantle dentin.

Correct answer is:

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

22. Choose **false** statements regarding treatment of apex fracture in permanent teeth:

- 1) the coronal fragment is to be immediately repositioned, following radiographic confirmation of accuracy;
- 2) the tooth should be stabilized with inflexible splint for 4 weeks;
- 3) the root fracture in the neck area is stabilized up to 4 months;
- 4) in case of significant displacement of the coronal part, this fragment should be removed and apical fragment should be left for spontaneous resorption;
- 5) in case of pulp necrosis, RTC should be performed in the coronal fragment up to the fracture line, and apical fragment should be removed.

Correct answer is:

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

**23.** Acute lymphoblastic leukemia (ALL) is recognized basing on the presence of more than:

- A.**15% of lymphoblasts in bone marrow.
- B.**20% of lymphoblasts in bone marrow.
- C.**25% of lymphoblasts in bone marrow.
- D.**30% of lymphoblasts in bone marrow.
- E.**35% of lymphoblasts in bone marrow.

**24.** Acute myeloid leukemia with monocytic morphology of M4/M5 may present as:

- A.**gingiva infiltration.
- B.**increased incidence of caries.
- C.**disseminated intravascular coagulation.
- D.**development of dentigerous cysts.
- E.**development of mucous cysts.

**25.** Solid tumors in children do not include:

- A.**Wilms tumor.
- B.**neuroblastoma.
- C.**rhabdomyosarcoma.
- D.**Ewing sarcoma.
- E.**chronic myeloid leukemia.

**26.** The most common symptoms after skull irradiation include oral cavity pain and dysphagia. Exacerbation of such symptoms occurs after:

- A.**1 to 3 days from the start of radiotherapy.
- B.**4 to 7 days from the start of radiotherapy.
- C.**7 to 10 days from the start of radiotherapy.
- D.**10 to 14 days from the start of radiotherapy.
- E.**14 to 21 days from the start of radiotherapy.

**27.** Grade 3 mucositis symptoms, when using anticancer drugs, include:

- A.**reddening.
- B.**erythema.
- C.**erythema and ulcerations.
- D.**ulcerations.
- E.**ulcerations and pseudomembranous lesions.

**28.** Choose risk factors of lymphoma development:

- 1) initial immunodeficiencies;
- 2) secondary immunodeficiencies;
- 3) immunosuppressive treatment;
- 4) viral infections;
- 5) immune diseases.

Correct answer is:

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

**29.** Choose rarely occurring chronic inflammatory disease, which is characterized by triad of symptoms: recurrent oral and reproductive organs mucous membrane aphthae and recurrent retinitis:

- A.**Behcet's syndrome.
- B.**lupus erythematosus.
- C.**scleroderma.
- D.**polyarteritis nodosa.
- E.**granulomatosis with vasculitis.

**30.** Choose often occurring endocrine disorder developing between 12 and 14 years of age, more often in girls, with coexisting accelerated growth and development of the facial part of the cranium and skeleton, premature teeth eruption, periodontium destruction, osteoporosis:

- A.**hypothyroidism.
- B.**hyperthyroidism.
- C.**diabetes.
- D.**hyperparathyroidism.
- E.**hypoparathyroidism.

**31.** In case of hyperfunction of pituitary gland, the effect of growth hormone overproduction in people with overgrown epiphyseal growth zones in long bones, is:

- A.**macroglossia.
- B.**nose and lips enlargement .
- C.**acromegaly – enlargement of distal parts of the body, thickening of the facial features with nose and lips enlargement and prognathism.
- D.**gigantism - enlargement of distal parts of the body, thickening of the facial features with nose and lips enlargement.
- E.**prognathism.

**32.** Such symptoms as: polydipsia, polyuria, weight loss, enuresis, recurring infections and candidiasis and possible glycosuria may indicate:

- A.**diabetes.
- B.**hyperthyroidism.
- C.**hypothyroidism.
- D.**hyperparathyroidism.
- E.**hypoparathyroidism

**33.** Bone fragility, blue sclera, progressive hearing loss and dental changes, are characteristic for:

- A.**osteogenesis imperfecta.
- B.**coronal dentin dysplasia.
- C.**root dentin dysplasia.
- D.**amelogenesis imperfecta.
- E.**dentinogenesis imperfecta.

**34.** Choose rare benign lesion observed only in infants, originating from the gingiva covering the alveolar process, characterized by mesenchymal cells proliferation with granular cytoplasm, usually pedunculated:

- A.**condyloma acuminatum.
- B.**squamous papilloma.
- C.**giant cell epulis.
- D.**fibrous epulis.
- E.**congenital epulis.

**35.** Indicate the disease featuring the ulceration on the lower surface of the tongue, triggered by injuries caused by moving the tongue in the anteroposterior direction against the lower incisors:

- A.** Riga-Fede ulceration.
- B.** Lyell syndrome.
- C.** Stevens-Johnson syndrome.
- D.** Osler-Weber-Rendu disease.
- E.** toxic epidermal necrolysis.

**36.** Clusters of small 2-5 small shallow ulcerations sized below 5mm, occurring on non-keratinized mucosa, with central yellow pseudomembranous necrotic focus with erythematous rim, is:

- A.**Riga-Fede ulceration.
- B.**small aphthae.
- C.**big aphthae.
- D.**herpetic gingivostomatitis.
- E.**common warts.

**37.** White plaque on oral mucosa in children, which after removal leave reddened, sometimes bleeding surface, is:

- A.** acute pseudomembranous candidiasis.
- B.** chronic pseudomembranous candidiasis.
- C.** median rhomboid inflammation.
- D.** herpangina.
- E.** infectious mononucleosis.

**38.** Infection caused by Coxsackie A group virus, where prodromal symptoms occur, cluster of 4 to 5 vesicles on the palate, palatal arches and pharynx, and also on hands and feet. This description refers to:

- A.** herpangina.
- B.** infectious mononucleosis.
- C.** chickenpox.
- D.** primary herpetic gingivostomatitis.
- E.** herpes zoster.

**39.** In CRA questionnaire for children aged 0 to 5 years, the indicator for moderate risk of caries is:

- A.** low socioeconomic status of the family.
- B.** dental plaque present.
- C.** the child consumes more than 3 snacks containing sugar or sweet drinks a day.
- D.** DMFT > 1.
- E.** active carious lesions present in mother/legal guardian.

**40.** Presence of teeth 16, 55, 53, 63, 65, 26, 36, 75, 74, 73, 83, 84, 85, 46 was noted in a 7-year-old Child, with carious lesions in teeth 16, 65, 75, fillings in teeth 26, 55, 75 and fissure sealant in 36. Indicate correct score of DMFT and dmft indexes in the child:

- A.** dmft=4, DMFT=2.
- B.** dmft=6, DMFT=2.
- C.** dmft=6, DMFT=3.
- D.** dmft=14, DMFT=2.
- E.** dmft=14, DMFT=3.

**41.** Choose correct statement concerning the PUFA index:

- A.** is used for evaluation of the incidence and advancement level related to untreated caries.
- B.** it presents the percentage of unmet needs in terms of conservative treatment of carious lesions.
- C.** the letter P indicates the number of teeth with caries.
- D.** the letter F indicates the presence of fistula or abscess.
- E.** the letter U indicates the number of teeth lost due to untreated caries.

**42.** Choose a clinical case of acute caries of early childhood:

- A.** 6 y. o. child with present carious lesions: on occlusal and centrifugal surface of tooth 54, occlusal and centrifugal surface of tooth 64 and centrifugal surface of tooth 74.
- B.** 5 y. o. child with present carious lesions: on occlusal surface of tooth 54, occlusal and centrifugal surface of tooth 64 and centrifugal surface of tooth 74
- C.** 4 y. o. child with present carious lesions: on occlusal surface of tooth 54, occlusal and centrifugal surface of tooth 64.
- D.** 3 y. o. child with present carious lesions: on occlusal surface of tooth 64, occlusal and centrifugal surface of tooth 84.
- E.** 2 y. o. child with incipient caries on labial surface of tooth 51.

**43.** The evaluation of risk of caries development in a 1 y. o. child:

- A.**It allows for reducing the colonisation of child's oral cavity with carious bacteria through applying intensive fluoride prophylaxis.
- B.**It is redundant, because cariogenic bacteria colonise the child's oral cavity only after teeth eruption.
- C.**It requires an assessment of mother's/legal guardian's health status, because in children of mothers with high caries intensity, higher risk of caries development occurs.
- D.**It is possible after teeth eruption, because it requires assessment of child's dentition.
- E.**It should be performed not in the first but between the 19<sup>th</sup> and 31<sup>st</sup> month of life, that is in first window of infection.

**44.** Choose correct statements regarding primary teeth caries:

- 1) the caries may develop not long after the eruption of primary teeth (even in the 6<sup>th</sup> or 8<sup>th</sup> month of life);
- 2) its course is always acute;
- 3) primary teeth caries is characterized with Rapid transition from initial to subsequent stages;
- 4) predisposed places in the order of their occupancy are: anatomic cavities, such as fissures, pits, palatal surfaces in the neck areas, approximal surfaces;
- 5) anterior maxillary teeth are usually not involved with caries due to the protective role of tongue and saliva from sublingual and submandibular glands.

Correct answer is:

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

**45.** Indicate true statement regarding the ITR method:

- A.** it allows for reduction of cariogenic microorganisms level.
- B.** it is a technique of manual preparation of carious lesion.
- C.** it cannot be applied when the teeth are not completely erupted.
- D.** it should only be applied in non-compliant children.
- E.** it requires a dry procedure field.

**46.** Choose correct statements regarding the Hall technique:

- 1) operative method for using preformed metal (also known as stainless steel) crowns to manage carious primary molar teeth
- 2) it is based on a hypothesis, that the carious process may be halted by isolating the carious bacteria colonizing the tooth tissue from oral cavity;
- 3) it can be used in treatment of noncavitated lesions, such as incipient caries;
- 4) prefabricated steel crown is mounted without removing the carious changed tissue first, with the use of glass-ionomer cement;
- 5) it is used foremost for restoration a tooth after pulp amputation.

Correct answer is:

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

**47.** The most commonly observed type of fissure on the occlusal surface is a fissure shaped as:

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

**48.** Primarily primary prevention consists in:

- A.** decreasing the sensitivity of teeth tissue to bacterial acids through applying fluoride varnish in the child.
- B.** preventing the increase of cariogenic bacteria number to pathogenic level.
- C.** delaying the colonisation of the child's oral cavity by cariogenic bacteria.
- D.** taking measures reinforcing the remineralisation and reducing demineralisation.
- E.** reducing the influence of bacteria through sealing healthy pits and fissures on occlusal surfaces.

**49.** The Green and Vermillion's simplified oral hygiene index (OHI-S) is used for assessing following surfaces:

- A.** buccal/labial and palatal lingual of 6 reference teeth (16,11,26,36,31,46).
- B.** buccal/labial lingual of 6 reference teeth (16,11,26,36,31,46).
- C.** buccal of teeth 16,11,26, 31 and lingual 36,46.
- D.** buccal of teeth 16,11,26, 31 and lingual 31,36,46.
- E.** buccal of molars, palatal of tooth 11 and lingual of tooth 31.

**50.** In a 5 y. o. child with caries risk estimated as high, it is recommended to use products containing high fluoride concentration, including:

- A.** gel 4 times a year.
- B.** gel or varnish twice a year.
- C.** gel or varnish 4 times a year.
- D.** varnish twice a year.
- E.** varnish 4 times a year.

**51.** Choose **false** statements regarding toothpastes:

- A.** increase of fluoride concentration containing 1000ppm by 500ppm causes caries reduction.
- B.** the recommended amount of paste should be respected.
- C.** children aged 2 to 3 years old swallow almost half of used paste's volume.
- D.** teeth of a child up to 8 years old should be brushed by their parents.
- E.** in children in their first year of life, with low caries risk, it is recommended to use a fluoride-free paste due to the presence of only mandibular incisors and high fluorosis risk.

**52.** High fluoride concentration in contact with enamel lasts for:

- A.** 10 to 15 minutes after the use of varnish or fluoride gel.
- B.** 24 hours after application of gel or fluoride foam.
- C.** 1 to 7 days after the use of fluoride varnish.
- D.** 1 to 7 days after the use of fluoride gel.
- E.** 1 to 7 days after the use of varnish or fluoride gel.

**53.** Choose the minimum amount of paste containing 1000ppm of fluoride swallowed accidentally by a child weighing 20kg, which caused early symptoms of poisoning:

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

- 54.** The most common complication of deciduous tooth injury visible in permanent tooth is:
- A.** enamel discolouration and hypoplasia.
  - B.** crown dilaceration.
  - C.** root bifurcation.
  - D.** root dilaceration.
  - E.** suppression of root development.
- 55.** Choose correct statement concerning completely luxated permanent tooth:
- A.** it is not recommended to store the luxated tooth in plastic food foil or water.
  - B.** after 30 minutes of storing the luxated tooth dry, half of dentin cells dies.
  - C.** storing the luxated tooth in pasteurized milk allows for maintaining the dentin vitality even up to 2 hours.
  - D.** yoghurt can be used instead of milk for storing the luxated tooth.
  - E.** tissue culture medium allows for maintaining dentin vitality up to 12 hours.
- 56.** Clinical examination of tooth 11 post trauma revealed crown reddish discoloration, increased mobility, displacement towards the palate, pain at palpation and bleeding from gingival sulcus. Choose most probable posttraumatic injury:
- A.** tooth subluxation.
  - B.** root fracture.
  - C.** tooth intrusion.
  - D.** tooth extrusion.
  - E.** lateral luxation.
- 57.** In case of root and crown fracture, extrusion of apical fragment is performed:
- A.** when the root does not qualify for a post and core
  - B.** in case of extensive, deep root and crown fracture
  - C.** exclusively, when the fracture is in the shape of a chisel in a root with not completely formed roots
  - D.** when the place of fracture does not impair the aesthetics
  - E.** in all types of fractures, when adequate length of root in a tooth with completely formed roots is can be achieved
- 58.** Indicate true statement regarding the tooth decoronation:
- A.** it is performed at mixed dentition stage (10 to 12 years of life), after ankylosis presence for at least 2 years.
  - B.** at the age of 10-12 years, the increase of infraposition is slower than at permanent dentition stage.
  - C.** if the tooth's root is filled, after cutting off the crown the filling is removed.
  - D.** if the root is not filled, it should be filled with MTA or Biodentine.
  - E.** cervical part of the root is removed up to 4 mm below the bone edge.
- 59.** Clinical examination of a child aged 3.5 years revealed shortening of the clinical crown of tooth 51, oedema and reddening of the gingiva in anterior part of the maxilla. Mother reported the child's fall on the stairs, which happened the day before. Choose correct management:
- A.** surgical reposition of tooth 51, if the radiological image confirms the shortening of the tooth.
  - B.** extraction of tooth 51, if the radiological image shows the tooth to be elongated.
  - C.** leaving the tooth 51 for spontaneous reeruption.
  - D.** leaving the tooth 51 for spontaneous reeruption, if the radiological image shows the tooth to be elongated.
  - E.** extraction, because the apex may damage the developing tooth bud.

**60.** A precancerous lesion of oral cavity most frequently encountered in children is:

- A.** leukoplakia.
- B.** glandular cheilitis.
- C.** lichen planus.
- D.** papillomatous lesions.
- E.** oral submucous fibrosis.

**61.** Indicate true statement regarding the leukaemia in a child:

- A.** oral cavity lesions occur more often in the course of chronic leukaemia than acute one.
- B.** gingival hyperplasia occurs as a result of haematologic disorders.
- C.** leukaemia is accompanied by impaired healing, e.g. after tooth extraction.
- D.** secondary symptom of leukaemia may be teeth pain without radiographic symptoms, and maxilla and mandible bone pain.
- E.** primary symptom of leukaemia may be acute necrotizing ulcerative gingivitis.

**62.** Child abuse is usually indicated when:

- 1) numerous bruising with the same stage of healing on the external part of femurs are observed;
- 2) pinchings including both sides of the ears are observed;
- 3) frequently repeated teeth trauma is observed;
- 4) hard palate abrasions, located behind incisors are observed;
- 5) injuries caused by biting on the inside of buccal mucosa.

Correct answer is:

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

**63.** Choose correct statement regarding the permanent tooth root apexification:

- A.** it is possible after direct pulp capping or coronal pulp amputation.
- B.** it allows for the root to fully form with apex formation.
- C.** it is a further root development stimulation, apex formation or only mineralised barrier formation in the apical part without the participation of pulp.
- D.** it is possible only through revascularization (endodontic regenerative treatment) or applying calcium hydroxide for several months.
- E.** it requires preserving a part of vital pulp.

**64.** An 8-year-old child, generally healthy, reported with acute, long-term pain of tooth 84. Clinical examination revealed oedema of the surrounding gingiva. Pulp not reacting to stimuli. After pulp chamber opening, profuse bleeding was observed.

Choose best therapeutic approach:

- A.** pulp amputation using formocresol .
- B.** pulp amputation using MTA.
- C.** open treatment.
- D.** root canal treatment.
- E.** tooth extraction.

**65.** Reversible pulpitis is characterized by:

- A.** pain subsiding instantly after stimulus withdrawal.
- B.** increased and prolonged pulp reaction to cold.
- C.** a fistula in the tooth area.
- D.** positive reaction to tapping.
- E.** loss of crown shine.

**66.** Presence of osteolytic defects in bones, lymph nodes enlargement, hepatosplenomegaly and oral cavity lesions in the form of gingivitis with tendency for ulcerations and granulation observed in a 10-year-old child may indicate:

- A.**Chediak Higashi syndrome.
- B.**Ehlers-Danlos syndrome.
- C.**histiocytosis X.
- D.**hypophosphatasia.
- E.**Papillon-Lefevre syndrome.

**67.** Which of the below mentioned oral cavity tumors occurring in children is characterized with infiltrative growth, recurrence and metastasis possibility:

- A.**neurofibroma.
- B.**melanotic neuroectodermal tumor of infancy.
- C.**congenital granular cell tumor.
- D.**hemangioma.
- E.**familial gigantiform cementoma.

**68.** Multiple oral cavity and subcutaneous tissue neurofibromas are present in a teenage patient. This is symptom characteristic for:

- A.** Hand-Schüller-Christian disease.
- B.** Neurofibromatosis type I (von Recklinghausen's syndrome).
- C.** hereditary gingival fibromatosis.
- D.** fibrous dysplasia.
- E.** glycogen storage disease type Ib.

**69.** Primary symptoms of leukemia in oral cavity include:

- 1) ulcerations caused by small blood vessels thrombosis due to leukemic infiltrations;
- 2) petechiae and hemangiomas;
- 3) mucosa pallor;
- 4) oral cavity candidiasis;
- 5) herpetic oral cavity inflammation;
- 6) graft-versus-host disease.

Correct answer is:

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

**70.** Multifocal odontomas, supernumerary and impacted teeth, and increased risk of colon cancer development, are symptoms characteristic for:

- A.**Gorlin-Goltz syndrome
- B.**Chediak Higashi syndrome
- C.**Gardner syndrome
- D.**Cleidocranial syndrome
- E.**Marie-Sainton syndrome

**71.** Proliferative-oedematous lesions appeared in the area of mandibular molars in a 12-year-old female, 5 years post kidney transplantation. Histopathology and immunohistochemical assay confirmed post-transplant lymphoproliferative disorder. Indicate the virus associated with this disease's etiology:

- A.** Epstein-Barr virus.
- B.** measles.
- C.** chickenpox (varicella).
- D.** HHV-8.
- E.** HPV-16.

**72.** Which genetic disorders predispose to cancer development at a young age:

- 1) Fanconi anemia;
- 2) dyskeratosis congenita;
- 3) xeroderma pigmentosum;
- 4) Stevens-Johnson syndrome;
- 5) dystrophic epidermolysis bullosa;
- 6) Behcet's disease.

Correct answer is:

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

**73.** Chromosomal instability syndromes, in which increased sensitivity to ionizing radiation occurs, include:

- 1) Ataxia Telangiectasia;
- 2) Bloom syndrome;
- 3) Fanconi anemia;
- 4) Nijmegen breakage syndrome;
- 5) Plummer-Vinson syndrome.

Correct answer is:

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

**74.** Yellowish nodules, filled with keratin, 2-3mm in diameter, located in lateral parts of the palate and buccal/labial side of gingival sulcus in newborns and infants, are called:

- A.** enamel pearls.
- B.** Epstein pearls.
- C.** bohn nodules.
- D.** gingival cysts.
- E.** eruption cysts.

**75.** Choose genetically determined diseases, in course of which blisters located on the skin and mucosa, caused by injuries, appear. Blisters heal leaving atrophic scars, which become deformed. Often loss of nail plate and oral cavity scars which decrease tongue movement and cause microstomia occur.

- A.** Dühring's disease.
- B.** dystrophic epidermolysis bullosa.
- C.** erythema multiforme.
- D.** pemphigus vulgaris.
- E.** toxic epidermal necrolysis.

**76.** In a 3-year-old patient residing in a town in which concentration of fluorides in drinking water is 0,7 mg/l, high risk of carious disease is observed. Which prophylactic methods should be used in such a patient?

- 1) brushing with paste containing 1000 ppm F, twice during a day;
- 2) brushing with fluoride gel with a concentration of 12500 ppm F twice a week;
- 3) fluoride foam with a concentration of 2% NaF application 4 times a year;
- 4) fluoride varnish with a concentration of 22600 ppm application 4 times a year;
- 5) fluoride gel with a concentration of 12500 ppm application on a tray;
- 6) fluoride tablet with a content of 0,25mg F once a day.

Correct answer is:

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

**77.** Aversion therapy methods, which shape child's behavior in a dental office, include:

- 1) desensitization;
- 2) distraction;
- 3) positive reinforcement;
- 4) signaling pain sensation;
- 5) tell, show, do;
- 6) voice control;
- 7) imitation;
- 8) selective parent exclusion;
- 9) silencing-vanishing.

Correct answer is:

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

**78.** Name the method, which allows the child to watch a movie presenting the procedure performed in a child in a similar age, before commencing it.

- A.**aversive conditioning.
- B.**desensitization.
- C.**modelling.
- D.**positive reinforcement.
- E.**tell, show, do.

**79.**

**80.** An indication for decoronation is:

- A.**posttraumatic ankylosis of permanent central incisor at infraposition of >1mm.
- B.**intrusion of permanent central incisor at infraposition of >1 mm.
- C.**reimpaction of second primary molar at infraposition of >2 mm.
- D.**ankylosis of first primary molar at infraposition of >2 mm.
- E.**extrusion of permanent central incisor.

**81.** Preparing a cavity on approximal surface of a molar with preserving the margin, entry to the decay in the area of healthy enamel on the occlusal surface and secondary entry on the approximal surface in the place of removed caries, is called:

- A.**closed tunnel method.
- B.**open tunnel method.
- C.**fissure method.
- D.**pinhole method.
- E.**in the form of minibox.

**82.** Teeth disorders in the form of big chambers, enamel developmental disorders, malocclusion, increase in teeth mobility, soft tissue calcification and so called brown tumors in bones, are the symptoms of:

- A.**hyperparathyroidism.
- B.**hyperthyroidism.
- C.**hypoparathyroidism.
- D.**adrenal insufficiency.
- E.**hypothyroidism.

**83.** Choose index used for evaluating the frequency and level of advancement of states related to untreated caries in primary dentition:

- A.**DMFt.
- B.**URTNI.
- C.**dmft.
- D.**pufa.
- E.**CI.

**84.** During a control examination in a 6-year-old girl with high caries risk, partially erupted first molars have been observed. Choose correct treatment method:

- A.** sealing the fissures with sealant based on bis-GMA resin.
- B.** sealing the fissures with sealant based on glass-ionomer cement modified with resin.
- C.** sealing the fissures with sealant based on conventional glass-ionomer cement.
- D.** sealing the fissures with sealant based on compomer.
- E.** surgical exposure of tooth's crown, allowing for sealing procedure.

**85.** A 13-year-old patient experienced a subluxation of upper central incisor 5 years before. Presently, the patient reported due to yellow discoloration of the crown, without pain. Clinical examination revealed decreased pulp reaction to vitality tests. Radiographic image shows most probably:

- A.** advanced external inflammatory resorption.
- B.** tooth chamber obliteration.
- C.** replacement resorption.
- D.** oval expansion of the chamber.
- E.** internal inflammatory resorption.

**86.** A history of a sick tooth which wishes to get healthy, told to a 4-year-old patient before the procedure of caries treatment, is an example of using characteristic, for this development period, feature:

- A.** animism.
- B.** scheduling.
- C.** egocentrism.
- D.** abstract reasoning.
- E.** rigidity of thinking.

**87.** Choose causes of internal tooth discoloration:

- 1) chromogenic bacteria of dental plaque;
- 2) alkaptonuria;
- 3) oral iron supplementation;
- 4) hyperbilirubinemia;
- 5) impregnation;
- 6) chlorhexidine;
- 7) congenital porphyria;
- 8) tetracyclines.

Correct answer is:

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

**88.** Choose prophylactic strategy consisting in detection of early stages of caries in children, reducing the progress of carious disease and not allowing for forming of new carious lesions:

- A.** primarily initial.
- B.** initial.
- C.** secondary.
- D.** primary.
- E.** tertiary.

**89.** Choose correct statement regarding the physiologic resorption of primary teeth:

- 1) resorption process begins 2 to 4 years before the dentition change;
- 2) resorption begins earlier in maxillary than mandibular teeth;
- 3) in the beginning resorption involves incisors. later canines and finally molars;
- 4) resorption of anterior teeth usually begins with labial surface of apical part of the root;
- 5) resorption of molars begins with the furcation area and on internal side of the roots.

Correct answer is:

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

**90.** Choose correct statement regarding hydroxyzine used in pharmacological premedication preceding dental treatment in children:

- 1) it decreases the muscle tension;
- 2) it has a calming, anti-anxiety and sleep-inducing effect;
- 3) it has an antihistamine and anti-emetic effect;
- 4) it has weak anticonvulsive and analgesic effect.

Correct answer is:

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

**91.** In order to perform local anesthesia in a 3-year-old child, one can use:

- 1) lidocaine without vasoconstrictors;
- 2) lidocaine with vasoconstrictors;
- 3) articaine;
- 4) mepivacaine.

Correct answer is:

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

**92.** Indications for implementing antibiotic prophylaxis in a child with proper functioning immune system are:

- 1) chronic purulent peri-root complications of pulpopathy;
- 2) diffuse inflammation in the area of causal tooth with pain and fever;
- 3) state post reimplantation of completely luxated permanent tooth;
- 4) infections which compromise extraoral face spaces;
- 5) subluxation of a tooth without accompanying soft tissue injuries.

Correct answer is:

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

**93.** From the cells of tooth follicle develop:

- 1) pulp;
- 2) dentin;
- 3) root cementum;
- 4) periodontium;
- 5) alveolar process bone.

Correct answer is:

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

**94.** Arrange the layers of initial carious lesion in enamel, starting with the enamel surface:

- 1) superficial layer;
- 2) transparent layer;
- 3) dark layer;
- 4) central layer.

Correct answer is:

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

**95.** Supernumerary teeth develop during:

- A.** migration of neural crest cells towards the branchial arch.
- B.** morphologic differentiation.
- C.** histologic differentiation.
- D.** dental lamina formation.
- E.** matrix deposition.

**96.** Choose subsequent stages of tooth germ formation:

- 1) cap;
- 2) bud;
- 3) bell;
- 4) dental lamina.

Correct answer is:

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

**97.** First window of infectivity for cariogenic bacteria *S. mutans*, according to Caufield, occurs between:

- A.** 3<sup>rd</sup> and 6<sup>th</sup> month of life.                      **D.** 19<sup>th</sup> and 31<sup>st</sup> month of life.  
**B.** 6<sup>th</sup> and 12<sup>th</sup> month of life.                      **E.** 32<sup>nd</sup> and 48<sup>th</sup> month of life.  
**C.** 12<sup>th</sup> and 18<sup>th</sup> month of life.

**98.** During the amelogenesis, fluoride:

- 1) serves as an inhibitor of mineral phase of enamel, which constitutes of hydroxyapatites;
- 2) replaces the hydroxyl ions causing the formation of fluorapatite/fluorhydroxyapatite;
- 3) promotes the correct formation of crystal structure of optimal physicochemical enamel stability, thus preventing the screw and edge spatial dislocations;
- 4) promotes formation of smaller apatite crystals with higher carbonate content;
- 5) inhibits the process of water and organic substances elimination from newly shelved enamel, i.e. in pre-eruptive enamel maturation.

Correct answer is:

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

**99.** Qualitative methods of caries diagnostics include:

- 1) visual-tactile;
- 2) digital subtractive radiography;
- 3) electric;
- 4) induced fluorescence;
- 5) optical.

Correct answer is:

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

**100.** Choose factors fostering the development and fast course of caries in permanent immature teeth:

- 1) wide dentinal tubule;
- 2) presence of birth line in enamel and dentin in first molars;
- 3) perykimata on enamel surface;
- 4) presence of spiral Korff fibers in mantle dentin;
- 5) large amount of interprismatic substance in enamel.

Correct answer is:

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

**101.** Cleidocranial dysplasia symptoms do not include:

- A.** short stature.  
**B.** premature fontanelle and commissure calcification.  
**C.** supernumerary teeth.  
**D.** delayed teeth eruption.  
**E.** absence or modified root cementum.

**102.** Choose correct order of mucositis formation stages:

- 1) mucosa ulcerations;
- 2) healing and repair;
- 3) initiation;
- 4) reinforcement stage;
- 5) sensitivity stage.

Correct answer is:

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

**103.** Choose factors influencing the frequency and intensity of mucositis:

- 1) patient's age;
- 2) current state of oral cavity;
- 3) type and location of cancerous lesion;
- 4) total dose and duration of chemotherapy;
- 5) type of cytotoxic medication.

Correct answer is:

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

**104.** Choose amide type anesthetic:

- A.** lidocaine.
- B.** mepivacaine.
- C.** articaine.
- D.** all of the above mentioned.
- E.** none of the above mentioned.

**105.** The most common childhood cancer type in Poland are:

- A.** leukemias.
- B.** lymphomas.
- C.** tumors of central nervous system.
- D.** soft tissue sarcomas.
- E.** hard tissue sarcoma.

**106.** Indicate the tooth injury that requires the longest period of splint fixation:

- A.** extrusion.
- B.** root fracture in apical third part.
- C.** root fracture in cervical third part.
- D.** lateral luxation.
- E.** complete luxation.

**107.** Late teething due to systemic causes is present in:

- 1) rickets resistant to vitamin D;
- 2) hypothyroidism;
- 3) vitamin D overdose;
- 4) anemia;
- 5) excessive supply of fluoride and iron;
- 6) A and D hypovitaminosis.

Correct answer is:

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

**108.** Choose local causes of delayed eruption:

- 1) supernumerary tooth;
- 2) regional odontodysplasia;
- 3) postoperative scarring;
- 4) alveoloschisis and cleft palate;
- 5) teeth crowding;
- 6) pulp calculus.

Correct answer is:

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

**109.** Treatment of pulpitis in permanent immature teeth using mortal methods:

- A.** is applicable in apexification procedures.
- B.** it is allowed only in the treatment of acute initial pulpitis.
- C.** it is allowed only after partial amputation.
- D.** it is allowed only in multiple root teeth.
- E.** it is contraindicated.

**110.** Indicate correct statement regarding the xylitol:

- A.** it is a six-carbon chain sugar alcohol.
- B.** it is 30 to 50 times sweeter than sucrose.
- C.** it is not metabolised by cariogenic bacteria.
- D.** it has higher calorific value than sucrose.
- E.** none of the above.

**111.** First primary mandibular molar has most frequently:

- A.** 1 root and 1 canal.
- B.** 2 roots and 2 canals.
- C.** 2 roots and 3 canals.
- D.** 3 roots and 3 canals.
- E.** 3 roots and 4 canals.

**112.** In apexification treatment of immature permanent teeth, the following may be applied:

- 1) calcium hydroxide;
- 2) formocresol;
- 3) Biodentine;
- 4) MTA;
- 5) glutaraldehyde.

The correct answer is:

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

**113.** In immature permanent teeth, apexification treatment is performed after:

- 1) indirect capping;
- 2) direct capping;
- 3) partial amputation;
- 4) total amputation;
- 5) partial vital extirpation;
- 6) partial total extirpation.

Correct answer is:

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

**114.** Choose **false** statements regarding mononucleosis:

- A.** atypical monocytes present in blood smear.
- B.** in younger children, ulcerations and ecchymosis are often found on the posterior wall of the pharynx and soft palate.
- C.** the disease subsides spontaneously.
- D.** it is caused by the Epstein-Barr virus.
- E.** incubation period is 2 to 6 days.

**115.** In case of a concussion of permanent tooth, the splint fixation period is:

- A.** up to 7 days.
- B.** 7 to 14 days.
- C.** 4 weeks.
- D.** 8 weeks.
- E.** splint fixation is not required.

**116.** Which of the below mentioned food products has the highest content of fluoride in 100g?

- A. carrot.
- B. spinach.
- C. fish.
- D. tomato.
- E. potato.

**117.** The oral cavity symptoms of hypothyroidism **do not** include:

- A. microglossia.
- B. delayed teeth eruption.
- C. enamel hypoplasia in primary and permanent teeth.
- D. dysgeusia.
- E. open bite.

**118.** Main clinical symptoms of leukemia in children **do not** include:

- A. excessive fatigue.
- B. increase in body weight.
- C. anaemia.
- D. skin ecchymosis .
- E. hepatosplenomegaly.

**119.** Choose correct combination of leukemias, arranging them according to the frequency in children, starting from the most common:

- 1) acute lymphoblastic leukemia;
- 2) acute myeloid leukemia;
- 3) chronic myeloid leukemia.

Correct answer is:

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

**120.** Arrange the formation stages of teeth, starting from the earliest:

- 1) histologic differentiation;
- 2) dental lamina formation;
- 3) matrix deposition;
- 4) migration of neural crest cells towards the ectomesenchyme of branchial arch;
- 5) eruption and root formation;
- 6) morphologic differentiation.

Correct answer is:

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