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"North Ossetian State Medical Academy"  
Ministry of Health of the Russian Federation

Department of Dentistry №3

APPROVED

minutes of the meeting of the Central  
coordination educational and methodical  
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**VALUATION FUND**

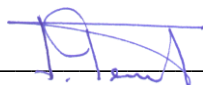
in the discipline "Educational simulation course in therapeutic dentistry"  
the main professional educational program of higher education - specialist's programs in the  
specialty 31.05.03 Dentistry,  
approved on March 30, 2022

for 5th year students  
Faculty of Dentistry

Reviewed and approved at the meeting of the department  
from March 21, 2022 No. 8

Head of the Department of Dentistry No. 3

MD



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Vladikavkaz, 2022

## **STRUCTURE OF FOS**

1. Title page
2. Structure of the FOS
3. Passport of evaluation tools
4. A set of evaluation tools:
  - list of questions on practical skills
  - situational tasks
  - benchmarks of test tasks
  - questions to offset
  - tickets to offset

## Passport of the Fund of Evaluation Funds by discipline

\_\_\_ Training simulation course in therapeutic dentistry

No. p/n	Name of the controlled section (topic) of the specialty / module	Code of the formed competence (stage)	Name of the evaluation tool
1	2	3	4
<b>Type of control</b>	<b>offset</b>		
<b>1.</b>	Modern approaches to diagnosing the pathology of hard tissues of teeth of various etiologies.  Modern composite materials designed to restore defects in hard tissues of teeth of carious and non-carious origin. Criterias of choice. Aesthetic restoration of the tooth.	UC-1, UC-6, GPC-1, GPC -5, GPC -6, PC-, PC-2	C, TT, ST
<b>2.</b>	Clinical application of therapeutic pads and insulating materials in the treatment of pathology of hard dental tissues. Classification. Criterias of choice.	UC-1, UC-6, GPC-1, GPC -5, GPC -6, PC-, PC-2	C, TT, ST
<b>3.</b>	Modern methods of preparation of hard tissues of teeth. Modern approaches to anesthesia in the clinic of therapeutic dentistry. Preparation of the anterior group of teeth for highly aesthetic composite veneers.	UC-1, UC-6, GPC-1, GPC -5, GPC -6, PC-, PC-2	C, TT, ST
<b>4.</b>	Restoration of defects in hard tissues of teeth with primary hard filling materials. Mistakes and complications in the treatment of defects in hard dental tissues.	UC-1, UC-6, GPC-1, GPC -5, GPC -6, PC-, PC-2	C, TT, ST
<b>5.</b>	Endodontic revision of root canals. Modern methods of root canal treatment. Modern approaches to the passage of root canals. Tactics of a doctor with impassable root canals and breaking off of an edodontic instrument in the root canal.	UC-1, UC-6, GPC-1, GPC -5, GPC -6, PC-, PC-2	C, TT, ST
<b>6.</b>	Materials and methods of temporary obturation of root canals, Indications for temporary obturation of root canals. The method of permanent obturation of root canals. Indications. Necessary set of materials tools.	UC-1, UC-6, GPC-1, GPC -5, GPC -6, PC-, PC-2	C, TT, ST

**Note:** C - colloquium, TT - test tasks, ST - situational tasks

### **List of questions on practical skills**

1. Examination of the patient, special and functional research methods in dentistry.
2. Determination of the tactics of managing a dental patient, identifying dental aspects in the practice of a dentist-therapist.
3. Identification of etiological factors in the development of pathology of hard tissues of the tooth, periodontium, diseases of the oral mucosa, precancerous conditions of the oral mucosa and the red border of the lips.
4. Drawing up a treatment plan for patients with diseases of the hard tissues of the teeth
5. Drawing up a treatment plan for patients with diseases of the pulp, periodontium,
6. Drawing up a treatment plan for patients with periodontal disease
7. Drawing up a treatment plan for patients with diseases of the oral mucosa, taking into account existing somatic diseases
8. Carrying out diagnostics of diseases of hard tissues of teeth, pulp, periodontal, periodontal and oral mucosa using dental computed tomography, dentinometry, laser Doppler flowmetry.
9. Carrying out professional oral hygiene using modern equipment (Piezon, Air-Flow, Vector, irrigator),
10. The use of ultrasonic and sonic handpieces in endodontic treatment,
11. The use of a dental microscope for repeated endodontic treatment, extraction of fragments of instruments, pins from the canals, irrigation of root canals (on phantoms).
12. Carrying out root canal treatment with rotary nickel-titanium instruments, sonic and ultrasonic tips, filling with thermoplasticized gutta-percha and the "continuous wave" method (on phantoms).
13. Carrying out adhesive splinting of mobile teeth (on models).

### **Questions for the test in the discipline**

- 1 What are composite materials?
- 2 List modern composite materials
- 3 Basic and additional methods of examination in the treatment of pathology of hard dental tissues.
- 4 The necessary set of tools for the restoration of defects in the hard tissues of the tooth of various classes according to Black.
- 5 Clinical use of therapeutic pads.
- 6 Insulating materials in the treatment of pathology of hard dental tissues. Classification.
- 7 Modern methods of preparation of hard tissues of teeth .
- 8 Modern approaches to anesthesia in the clinic of therapeutic dentistry.
- 9 Preparation of anterior teeth for highly esthetic composite veneers.
- 10 Metal filling materials: past or present in dentistry?
- 11 Mistakes and complications in the treatment of hard dental tissues.
- 12 Types of composite materials.

- 13 Classification of composite materials.
- 14 Requirements for composite materials.
- 15 Indications and contraindications for the use of composite materials.
- 16 Stages of work with composite materials.
- 17 CIC classification.
- 18 Main properties of SIC.
- 19 Positive properties of GIC
- 20 Negative properties of GIC
- 21 Indications for the imposition of medical pads.
- 22 Requirements that apply to materials for medical pads.
- 23 Disadvantages and advantages of therapeutic pads.
- 24 Non-carious lesions of the teeth.
- 25 Adhesive systems in dentistry.
- 26 When is root canal treatment necessary?
- 27 Modern methods of root canal treatment.
- 28 Modern approaches to the passage of root canals.
- 29 Tactics of a doctor in case of impassable root canals and breakage of an endodontic instrument.
- 30 Medical treatment of root canals.
- 31 How are endodontic instruments ISO marked?
- 32 What instruments are used to pass root canals?
- 33 What tools are used to widen root canals?
- 35 What is used to expand the orifices of root canals?
- 36 Characteristics of nickel-titanium tools.
- 37 What methods of root canal treatment do you know?
- 38 Describe root canal treatment using the Step-Back method.
- 39 Describe root canal treatment using the Crown-Down method.
- 40 Is there a need for devitalizing therapy?
- 41 Materials and methods for temporary obturation of root canals.
- 42 Indications for temporary obturation of root canals.
- 43 Technique of permanent obturation of root canals.
- 44 Indications for permanent obturation of root canals.
- 45 Instruments for permanent and temporary filling of root canals.
- 46 What is EDTA? Method of application.
- 47 Biological method of treatment of pulpitis, the essence of this method.
- 48 The use of gutta-percha pins for filling root canals.
- 49 Method of lateral condensation.
- 50 Vertical condensation technique.
- 51 Physiotherapeutic methods of practical endodontics.

## **Situational tasks**

### **Task #1**

Patient R., 34 years old, went to the dentist complaining of pain at 15 when eating solid food, the pain appeared a month ago.

Objectively: there is a deep carious cavity on the masticatory surface of 15, painful probing along the bottom of the cavity, the reaction to cold is painful, short-term.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. What additional methods of examination can confirm the diagnosis?
4. Perform differential diagnostics.
5. What method of anesthesia will be required?

### **Task #2**

Patient D., 16 years old, came to the clinic of therapeutic dentistry for the purpose of sanitation. When viewed on the vestibular surface 21 in the cervical region, a chalk-like spot measuring 0.3 cm by 0.4 cm was found. When probing, the surface of the spot is smooth. According to the patient, it became known that the spot appeared 3 months ago.

1. Make a preliminary diagnosis.
2. Name additional examination methods.
3. Perform differential diagnostics.
4. Prescribe a treatment.
5. Give recommendations on oral hygiene.

### **Task #3**

Patient L. applied for sanitation. Makes no complaints. Objectively: on the vestibular surface 11 in the cervical area there is a chalk-like spot with fuzzy borders up to 0.3 cm in diameter, the surface of the spot is smooth, there is no reaction to thermal stimuli.

1. Make a preliminary diagnosis.
2. Name additional examination methods.
3. Perform differential diagnostics.
4. Make a treatment plan.
5. Give recommendations on oral hygiene.

#### **Task #4**

Patient A., 30 years old, turned to a dentist with complaints of fast-passing pain from sweets in the 25th tooth, the pain appeared a month ago.

Objectively: there is a carious cavity within the enamel on the chewing surface 25, probing is painless, the reaction to cold is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Name additional examination methods.
4. Perform differential diagnostics.
5. What filling materials should be used?

#### **Task number 5**

Patient K., aged 23, complained of short-term pain from temperature stimuli in the 16th tooth. When viewed on the crown, there are no visible carious cavities; when the tooth is irrigated with cold water, short-term pain is noted.

On the intraoral radiograph on the proximal-distal surface, there is a violation of the structure of the hard tissues of the tooth in the middle layers of the dentin.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. What are the features of the preparation of such carious cavities?
4. What filling materials should be used for treatment?
5. Why is it necessary to restore the contact point when filling?

#### **Task number 6**

Patient R., aged 26, complained of short-term pain in the 13th tooth when eating cold food. 13 tooth was treated a year ago for uncomplicated caries. Pain appeared 2 months ago after a filling fell out.

Objectively: there is a carious cavity of medium depth on the contact-medial surface of the 13th tooth. The cutting edge is saved. Probing is painful along the enamel-dentine border, percussion is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Name the research methods necessary to clarify the diagnosis.

4. What filling materials should be used for treatment?
5. What are the features of filling such cavities?

### **Task #7**

Patient K., 24 years old, came to the clinic of therapeutic dentistry with complaints of short-term pain in the 37th tooth when eating. Pain appeared 2 months ago. On objective examination at an approximate

the distal surface of the 37th tooth has a deep carious cavity. Probing is painful along the bottom and walls of the carious cavity, percussion is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Name the additional examination methods that need to be carried out to clarify the diagnosis.
4. Perform differential diagnostics.
5. Name the stages of treatment.

### **Task #8**

Patient M., 30 years old, came to the clinic of therapeutic dentistry with complaints of short-term pain in the 24th tooth when eating. The pain appeared after a filling fell out a month ago.

Objectively: there is a deep carious cavity on the approximal-medial surface of the 24th tooth.

Probing is painful along the bottom and walls of the cavity, the reaction to cold is painful, short-term, percussion is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Name additional research methods that need to be carried out to clarify the diagnosis.
4. Perform differential diagnostics.
5. Name the stages of treatment.

### **Task #9**

Patient K., 25 years old, came to the clinic of therapeutic dentistry with complaints of short-term pain in the 17th tooth when eating. Five days ago, the 17th tooth was treated for medium caries, the filling was made of the material "Evicrol", the lining was made of phosphate cement "Unifas".

Objectively: there is a filling on the chewing surface of the 17th tooth. Percussion 17 is painless.

1. What are the reasons for the patient's complaints?



2. List the medical errors that could lead to this clinical situation.
3. What additional methods of examination should be carried out?
4. What is the class of carious cavity according to Black?
5. Doctor's tactics in this situation.

### **Task #10**

Patient A., 45 years old, came to the clinic of therapeutic dentistry with complaints about the loss of a filling from the 12th tooth, pain from cold, sweet in the 12th tooth.

From the records in the medical record, it became known that the 12th tooth was treated six months ago for medium caries, the filling was carried out with the material "Evikrol".

Objectively: there is a carious cavity of medium depth on the contact-lateral surface of the 12th tooth. Probing is painful along the enamel-dentine border, the reaction to cold is painful, short-term. Percussion is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Name the possible reasons for the filling to fall out.
4. What additional methods of examination should be carried out?
5. What kind of filling material is more expedient for filling the carious cavity?

### **Task #11**

Patient A., 45 years old, came to the clinic of therapeutic dentistry with complaints about the loss of a filling from the 11th tooth.

Objectively: on the lateral surface of the 11th tooth there is a deep carious cavity with destruction of the cutting edge of the crown. Probing is painful along the enamel-dentin border and the bottom of the cavity, the reaction to cold is painful, short-term, percussion is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Perform differential diagnostics.
4. What kind of anesthesia should be carried out?
5. What material is more appropriate to restore this defect?

### **Task #12**

**Patient O., 38 years old, came to the clinic of therapeutic dentistry with complaints of short-term pain in the 25th tooth when eating. The pain appeared after a filling fell out 2 months ago.**

Objectively: there is a deep carious cavity on the vestibular surface in the cervical region of the 25th tooth. Probing is painful along the bottom and walls of the carious cavity, the reaction to cold is painful, percussion is painless.

1. Make a diagnosis.
2. What is the class of carious cavity according to Black?
3. Name the methods of examination that need to be carried out to clarify the diagnosis.
4. Perform differential diagnostics.
5. Name the stages of treatment.

### **Task #13**

Patient A., aged 42, went to the clinic of therapeutic dentistry for the purpose of sanitation. Objectively: on the oral surfaces of the 33rd, 32nd, 31st, 41st, 42nd, 43rd teeth there is tartar covering 1/3 of the crown.

1. What tools can be used to remove tartar?
2. What protective equipment should the doctor use during the scaling procedure?
3. Give advice to the patient on oral hygiene.
4. How does the tartar removal procedure end?
5. What should the doctor pay attention to after tartar removal?

### **Task #14**

Patient B., 35 years old, applied to the clinic of therapeutic dentistry for the purpose of sanitation.

On examination: the palatal surfaces of the teeth of the upper jaw and the lingual surfaces of the teeth of the lower jaw are covered with a dark brown plaque up to 1/2 of the crown of the tooth.

1. What is the dental deposit?
2. What instruments can be used to remove this dental deposit?
3. What protective equipment should the doctor use during the plaque removal procedure?
4. Give recommendations on oral hygiene.
5. What can a smoker's plaque hide?

## **Non-carious lesions of hard tissues of the tooth**

### **Task number 15**

A 17-year-old patient came to the clinic of therapeutic dentistry with complaints of light brown spots on the incisors of the upper and lower jaws. When probing, the surface of the spots is smooth, the enamel is shiny.

From the anamnesis it is known that from 3 to 7 years the patient lived in an area with a fluorine content in water of 2.5 mg/l.

1. Make a diagnosis.
2. Perform differential diagnostics.
3. Prescribe a treatment.
4. Name the preventive measures for this pathology.
5. What caused the development of the disease?

### **Task number 16**

When examining the patient's oral cavity, the doctor drew attention to chalky spots on the tubercles of the 25th tooth, the boundaries of the spots are fuzzy, the surface is smooth.

From the anamnesis: the spots appeared immediately after the eruption of 25, they do not cause discomfort, they did not change in size.

1. Name the most likely diagnosis.
2. Carry out differential diagnostics.
3. Name the most likely cause of such changes in the hard tissues of the tooth.
4. What additional methods of examination can be carried out?
5. Prescribe a treatment.

### **Task number 17**

A 25-year-old patient applied for oral cavity sanitation. When viewed on the vestibular surface, closer to the cutting edge, pinpoint depressions were found in the enamel of 11, 21 teeth, the bottom of the depressions was pigmented.

From the anamnesis: depressions appeared immediately after eruption, pigmented later, do not cause any discomfort. Lives in an area with a temperate climate and the concentration of fluorine in drinking water is 1 mg / l.

1. Make a diagnosis.
2. Perform differential diagnostics.

3. What could be the cause of this disease?
4. Prescribe a treatment.
5. What filling materials should be used?

### **Task number 18**

A 46-year-old patient addressed the clinic of therapeutic dentistry with complaints of pain in the 12th tooth when biting. The pains appeared after the patient tried to crack a walnut.

Objectively: the 12th tooth is mobile in the vestibular-oral direction, percussion is painful, EOD=15  $\mu$ A.

1. Make a diagnosis.
2. What additional methods of examination should be carried out to clarify the diagnosis?
3. Doctor's tactics.
4. When should a tooth be depulped?
5. Prescribe a general treatment.

### **Task number 19**

An 18-year-old patient complained of pain in the 11th tooth that arose immediately after an injury. On examination: the crown of the 11th tooth was broken off by 1/2 of its length, the tooth cavity was opened, the pulp bleeds, and is sharply painful on probing.

1. Make a diagnosis.
2. Name additional diagnostic methods.
3. Make a treatment plan.
4. Name the filling materials for restoration of a crown defect.
5. Name the methods of restoration.

### **Task number 20**

A 35-year-old patient came to the clinic of therapeutic dentistry with complaints of a chipped corner of the crown of the 22nd tooth, which occurred while eating solid food.

Objectively: the medial angle of the crown 22 is broken in the dentine, probing is painful along the enamel-dentine border, percussion is painless.

1. Make a diagnosis.
2. Name the methods of examination to clarify the diagnosis.

3. What method of treatment is indicated in this case.
4. Name the filling materials for restoration of a crown defect.
5. What recommendations should be given to the patient after the restoration of the tooth crown?

#### **Task number 21**

A 46-year-old patient applied to the clinic of therapeutic dentistry for the purpose of sanitation. When viewed on the vestibular surface in the cervical region of the 23rd tooth, a defect in the form of a wedge was found. When probing, the walls of the defect are smooth and painless.

1. Make a diagnosis.
2. Perform differential diagnostics.
3. Name the causes of this disease.
4. Are there effective measures to prevent this pathology?
5. Prescribe a treatment.

#### **Task number 22**

A 43-year-old patient complained of pain in the front teeth of the upper jaw from sour, cold, the presence of defects in these teeth.

Anamnesis: defects appeared 5 years ago, pain from cold appeared 3 months ago. Suffering from thyrotoxicosis.

On examination: on the vestibular surface of the equatorial region 12,11,21,22, concave oval enamel defects, up to 0.3 cm in size with a smooth, dense bottom.

1. Make a diagnosis.
2. Perform differential diagnostics.
3. Name the stages of this disease.
4. Specify the causes.
5. Prescribe a treatment.

#### **Task number 23**

A 38-year-old patient complained of pain from temperature and chemical irritants in the anterior teeth of the upper and lower jaws. Works at the chemical industry. On examination 12,11,21,22,32,31,41,42 the height of the crowns was reduced by 1/3, pigmented dense dentin was exposed along the cutting edge, probing was painless.

1. Make a diagnosis.

2. Perform differential diagnostics.
3. Explain the etiology of this disease.
4. Prescribe a treatment.
5. Specify the methods of prevention of this disease.

#### **Task number 24**

A 31-year-old patient complained of a sharp pain from cold air, a feeling of soreness in the teeth of the upper and lower jaws. Examination revealed the exposure of the necks of the teeth without violating the integrity of hard tissues. A light touch on the teeth also causes soreness.

1. Make a diagnosis.
2. What general treatment can be prescribed?
3. What physiotherapy procedures are necessary for this pathology?
4. What preparations can be used for local treatment?
5. Why is it not advisable to carry out local treatment with a 30% aqueous solution of silver nitrate?

#### **Task number 25**

A 23-year-old patient complained of pain in the 21st tooth immediately after the injury.

Objectively: the crown of the 21st tooth is preserved, changed in color, sharp pain on percussion. On the X-ray image of the 21st tooth in the middle of the root, there is a line of enlightenment running in the transverse direction.

1. Make a diagnosis.
2. Perform differential diagnostics.
3. Make a treatment plan.
4. Name the filling materials for restoration of a crown defect.
5. Name the methods of tooth color correction.

#### **Task number 26**

An 18-year-old patient came to the clinic of therapeutic dentistry with complaints of soreness of the front teeth, "shortening" of 12, which arose immediately after the injury.

Objectively: the 12th tooth is displaced into sockets towards the jaw body. The crown of the 12th tooth is preserved, not changed in color, sharp pain on percussion. On the X-ray picture of the 12th tooth, the periodontal gap in the region of the root apex is not traced.

1. Make a diagnosis.
2. Perform differential diagnostics.
3. Indicate the WHO classification of tooth fractures.
4. Make a treatment plan.
5. Reasons for which it is advisable to conduct depulstation with this diagnosis.

### **Samples of test tasks**

**on\_discipline\_** Training simulation course in therapeutic dentistry for students of the 5th year

**by specialty\_**31.05.03. Dentistry

1. CHEMICALLY CURING MACRO-FILLED COMPOSITE MATERIALS INCLUDED:

- a) Composite
- b) Simulate
- c) a) and b) are correct
- d) Fuji IX

2. THE MAIN FORM OF PRODUCTION OF MODERN COMPOSITE MATERIALS OF CHEMICAL CURING:

- a) pasta
- b) powder-liquid
- c) paste-powder
- d) paste-liquid

3. FINISHING LIGHT POLYMERIZATION IS CARRIED OUT:

- a) at the end of the polishing of the filling
- b) after fixing the last portion of the light-curing composite filling material
- c) after polymerization of the last portion of the composite
- d) after applying the polishing paste

4. THE EFFICIENCY AND CORRECT POLISHING OF THE RESTORATION IS DETERMINED:

- a) the presence of a mirror gloss of the dried surface of the restoration, which is indistinguishable in terms of gloss from natural tooth enamel
- b) subjective feelings of the patient
- c) the presence of dullness of the dried surface
- d) match the shade of the restoration and tooth tissues in the wet state

5. INDICATE THE CATALYST ACTIVATED FOR CHEMICAL POLYMERIZATION IN CHEMICALLY CURING COMPOSITES:

- a) camphorquinone
- b) benzoyl peroxide and amine
- c) urea peroxide
- d) camphor

6. WHEN SELECTING THE COLOR OF THE FILLING MATERIAL, IT IS NECESSARY TO CONSIDER:

- a) the depth and localization of the existing defect in the hard tissues of the tooth
- b) the location of the restored tooth in the dental arch
- c) constitutional, gender, age characteristics
- d) everything is correct

7. MICRORETENTION OF THE FILLING MATERIAL IS

- a) fixation of the filling due to the convergence of the walls of the carious cavity
- b) fixation of the filling material in the retention points
- c) penetration of the adhesive and filling material into the microspaces of the etched enamel
- d) fixing the seal due to anchors, pins, posts

8. FLUID LIGHT-CURING COMPOSITES ARE:

- a) Revolution
- b) Tetric
- c) Dyract
- d) Fuji IX

9. INDICATE THE REASONS FOR THE PHOTOCOMPOSITE SEAL LOSS:

- a) improper formation of a carious cavity
- b) the ingress of saliva or blood on the treated surface of the tooth
- c) no bond
- d) single-stage polymerization of large volumes of photocomposite
- d) everything is correct

10. ACTION OF DENTINE ADHESIVE ON DENTIN

- a) increases the flow of dental cerebrospinal fluid
- b) fills the dentinal tubules
- c) stops the flow of dental cerebrospinal fluid
- d) wets and disinfects
- e) true c) and d)

11. LIST THE MOST COMMON MISTAKE WHEN USING COMPOSITE MATERIALS:

- a) the use of microfilled composites for the restoration of surfaces of 1.2 classes, the cutting edges of the anterior teeth
- b) ignoring the rules for directing the rays of a polymerization lamp
- c) contact with the glued surface of the oral or gingival fluid
- d) true b, c
- d) everything is correct

12. THE DENTIN SURFACE IS TREATED WITH A DENTINE ADHESIVE FOR THE PURPOSE:

- a) improving the bonding of dentin and composite
- b) increasing the mechanical strength of thinned dentin
- c) reducing the sensitivity of dentin to irritants
- d) all of the above are true

13. WHEN USING 5th GENERATION ADHESIVE SYSTEMS, THE FOLLOWING IS CARRIED OUT:

- a) only etching of dentin
- b) total etching
- c) enamel etching only



d) tissue etching is not carried out

14. COMPOSITE MATERIALS WITH A PARTICLE SIZE OF THE INORGANIC FILLER MORE THAN 1  $\mu\text{m}$ , ARE RELATED TO:

a) macro-filled

b) hybrid

c) microfilled

d) mini-filled

15. FLOWABLE COMPOSITES ARE USED FOR

a) fissure sealing

b) filling cavities of the 2nd class

c) filling cavities of the 5th class

d) all of the above are true

16. INDICATIONS FOR THE USE OF COMPOMERS:

a) carious cavities of 3 and 5 classes

b) small carious cavities of 1 and 2 classes

c) non-carious lesions of hard dental tissues

d) all of the above are true

17. TO INCREASE ENAMEL CARIES RESISTANCE, IV AND V GENERATION ADHESIVE SYSTEMS CONTAIN:

a) fluorine compounds

b) calcium compounds

c) potassium compounds

d) all of the above are true

18. UNACCEPTABLE COMBINATIONS OF FILLING MATERIALS

a) eugenol-containing materials - light-cured composite material

b) zinc phosphate cement - chemically cured composite material

c) glass-ionomer cement - light-curing composite material

d) polymer medical pad - light-cured composite material

19. THE MECHANISM OF THE COMPOSITE CURE IS BASED ON THE PROCESS

a) crystallization

b) polymerization

c) dissolution

d) all of the above are true

20. ETCHING OF HARD TISSUES OF THE TOOTH IS CARRIED OUT WITH THE PURPOSE:

1. remineralization

2. caries diagnostics

3. improve adhesion

4. anesthesia

5. sclerosis

21. INTRODUCTION OF A CHEMICALLY CURED COMPOSITE IS RECOMMENDED TO BE CARRIED OUT:

a) in layers

b) one or two portions, carefully pressing the material to the bottom and walls of the cavity, with some excess material

c) in small portions with careful condensation of each portion

d) application technique does not matter

22. HARDENING TIME OF CHEMICAL CURING COMPOSITE:

a) 10 minutes

b) 3-5 minutes

c) 1-2 minutes

d) 8-10 minutes

23. CHEMICALLY CURING COMPOSITES ARE:

- a) Talan
- b) Charisma PPF
- c) Consize
- d) Degufil
- d) everything is correct

24. SPECIFY THE CATALYST ACTIVATED FOR CHEMICAL POLYMERIZATION IN CHEMICALLY CURING COMPOSITES:

- a) camphorquinone
- b) benzoyl peroxide and amine
- c) urea peroxide
- d) camphor

25. MICRORETENTION OF THE FILLING MATERIAL IS

- a) fixation of the filling due to the convergence of the walls of the carious cavity
- b) fixation of the filling material in the retention points
- c) penetration of the adhesive and filling material into the microspaces of the etched enamel
- d) fixing the seal due to anchors, pins, posts

26. APPLIED LAYERS OF LIGHT-CURING CPM SHOULD NOT EXCEED THE THICKNESS OF MORE THAN:

- a) 1mm
- b) 2-Zmm
- c) 0.5 mm
- d) 5 mm

27. LIST CONTRAINDICATIONS TO THE USE OF PHOTOCOMPOSITES:

- a) exudative inflammation of the marginal gums, bleeding
- b) subgingival spread of caries
- c) poor oral hygiene
- d) everything is correct

28. ACTION OF DENTINE ADHESIVE ON DENTIN

- a) increases the flow of dental cerebrospinal fluid
- b) fills the dentinal tubules
- c) stops the flow of dental cerebrospinal fluid
- d) wets and disinfects
- e) true c) and d)

29. THE DENTIN SURFACE IS TREATED WITH A DENTINE ADHESIVE FOR THE PURPOSE:

- a) improving the bonding of dentin and composite
- b) increasing the mechanical strength of thinned dentin
- c) reducing the sensitivity of dentin to irritants
- d) all of the above are true

40. APPLICATION OF 4, 5 GENERATIONS ADHESIVE SYSTEM PROMOTES EDUCATION:

- a) hybrid zone
- b) smeared layer
- c) oxygen-inhibited layer
- d) all of the above are true

41. WHEN USING THE 5th GENERATION ADHESIVE SYSTEM, THE ROLE OF A PRIMER IS PERFORMED BY:

- a) the first portion of the adhesive system liquid
- b) the second portion of the adhesive system liquid
- c) 5th generation adhesive system does not contain a primer
- d) pickling system

42. THE RESULT OF VOLUME SHRINKAGE OF A PHOTOCOMPOSITE

- a) discoloration of the tissues of the tooth
- b) inflammation of the gingival margin
- c) fractures of the walls of the tooth
- d) hypersensitivity of tooth tissues

3. Etching of enamel is carried out before applying a filling from:

- 1. JIC
- 2. composite
- 3. polycarboxylate cement
- 4. silver amalgam
- 5. silicophosphate

44. Halogen light lamps are used for:

- 1. surgical field disinfection
- 2. drying of the mouth
- 3. enamel remineralization
- 4. cabinet disinfection
- 5. composite polymerization

45. When filling carious cavities using the “closed sandwich” method, the gasket:

- 1. covered with composite
- 2. not covered by composite
- 3. not used
- 4. superimposed on the edges of the cavity
- 5. applied to walls and edges

46. Macro-filled composite materials have positive properties:

- 1. strength, radiopacity
- 2. strength, poor polishability
- 3. low color fastness
- 4. accumulation of plaque on the surface
- 5. toxicity

47. Bonding systems include:

- 1. orthophosphoric acid
- 2. primer and adhesive
- 3. hydrochloric acid
- 4. hydrofluoric acid
- 5. polyacrylic acid

48. Shrinkage of the chemically cured composite occurs towards:

- 1. oral
- 2. vestibular
- 3. light source
- 4. tooth cavity
- 5. uniform in volume

49. THE GROUP OF MATERIALS FOR THERAPEUTIC PADS INCLUDES:

- a) Calmecin
- b) life
- c) calcipulpe
- d) all of the above are true

50. AS A MEDICAL PAD USE:

- 1. artificial dentin
- 2. pastes based on calcium hydroxide
- 3. dentin paste
- 4. resorcinol-formalin paste
- 5. phosphate cement

51. GASKET MATERIALS BASED ON CALCIUM HYDROXIDE HAVE POSITIVE PROPERTIES:

1. hardness, strength
2. odontotropic action
3. aesthetic qualities
4. solubility
5. shrinkage

52. METHOD OF PREVENTIVE CARIOUS CAVITY EXPANSION SUGGESTED:

- a) I.G. Lukomsky
- b) Black
- c) E.V. Borovsky
- d) Fisher

53. REQUIREMENTS FOR THERAPEUTIC PAD MATERIALS

- a) long curing time
- b) short mixing time
- c) have an odontotropic effect
- d) have an anesthetic effect

54. Composite to avoid the development of abfraction defects in the carious cavities of the cervical region of the teeth:

- a) low viscosity composite (flowable composite)
- b) chemical curing composite
- c) chemically cured macro-filled composite
- d) all of the above are true

55. In microfilled composites, filler particles have a size ( $\mu\text{m}$ )

1. 1-100
2. fifty
3. more than 1
4. one
5. less than 1

56. Fluid composites are introduced into the cavity:

1. trowel
2. plugger
3. syringe
4. syringe and spatula
5. amalgamator

57. Shrinkage of the light-cured composite occurs to the side:

1. light source
2. tooth cavity
3. vestibular
4. oral
5. occlusal

58. For the adhesion of the composite material during the restoration of cavities, the following is used:

1. phosphate cement
2. bonding system
3. 37% phosphoric acid
4. calcium hydroxide paste
5. artificial dentin

59. For finishing fillings made of composite materials in class II cavities, the following are used:

1. steel ball burs
2. carbide ball burs
3. carbide cylindrical burs

4. fine diamond heads and strips
5. carborundum stones
60. UNACCEPTABLE COMBINATIONS OF FILLING MATERIALS
  - a) eugenol-containing materials - light-cured composite material
  - b) zinc phosphate cement - chemically cured composite material
  - c) glass-ionomer cement - light-curing composite material
  - d) polymer medical pad - light-cured composite material
61. THE MECHANISM OF CURE COMPOSITES IS BASED ON THE PROCESS
  - a) crystallization
  - b) polymerization
  - c) dissolution
  - d) all of the above are true
62. LIST THE ADVANTAGES OF PHOTOCOMPOSITE FILLING MATERIALS:
  - a) matching the color and transparency of the enamel and dentin of the tooth
  - b) color fastness
  - c) enough time to model the restoration
  - d) everything is correct
63. INDICATIONS FOR THE USE OF COMPOMERS:
  - a) carious cavities of 3 and 5 classes
  - b) small carious cavities of 1 and 2 classes
  - c) non-carious lesions of hard dental tissues
  - d) all of the above are true
64. LAYER OF DENTIN, THE SURFACE OF COLLAGEN FIBERS WHICH COVERED WITH RESIN, IS CALLED:
  - a) hybrid
  - b) lubricated
  - c) chalky
  - d) shiny
65. COMPOSITE MATERIAL OF INCREASED FLUIDITY TO CREATE ADAPTIVE LAYER IS INTRODUCED INTO A CAVITY THICKNESS:
  - a) 4-5 mm
  - b) 0.5-1 mm
  - c) 1-1.5 mm
  - d) flowable composites are not used to create an adaptive layer
66. MATERIALS FOR FILLING CAVITIES OF CLASS I ARE:
  - a) compomers
  - b) JIC
  - c) ormokers
  - d) hybrid composite filling materials
  - d) everything is correct
57. WHEN RECOVERING THE LOWER MOLAR MOLAR, IT IS NECESSARY TO REMEMBER:
  - a) marginal enamel ridges are restored powerful and rounded
  - b) buccal tubercles are restored smoother and more powerful, lingual - pointed
  - c) weakened tubercles and thinned walls are covered with restorative material
  - d) everything is correct
58. IMPROPER BEVERING AND SMOOTHING OF ENAMEL CAN CAUSE:
  - a) to deterioration of adhesion
  - b) to violation of the marginal fit
  - c) worsening aesthetics
  - d) all of the above are true

59. THE USE OF THERAPEUTIC AND INSULATING PAD WHEN USING MODERN ADHESIVES IS RECOGNIZED:

- a) necessary
- b) redundant
- c) preferably only if there is a danger of opening the tooth cavity
- d) it is necessary when the cavity of the tooth is opened
- e) all are true except a)

60. PRIMER IS A SUBSTANCE:

- a) with high wetting ability, facilitating the penetration into the pores and deepening of the dentin and enamel of the filling material
- b) providing adhesion of the composite and dentin (base lining)
- c) dissolves the mineral structures of enamel
- d) all of the above are true

61. COMPOSITE MATERIALS WITH A PARTICLE SIZE OF INORGANIC FILLER MORE THAN 1  $\mu\text{m}$  ARE:

- a) macro-filled
- b) hybrid
- c) microfilled
- d) mini-filled

62. TOO THICK ADHESIVE PROMOTES:

- a) better adhesion of the filling material to the hard tissues of the tooth
- b) the formation of a line of weakness of the restoration
- c) the formation of a hybrid zone
- d) the formation of a smeared layer

63. INTRODUCTION OF A CHEMICALLY CURED COMPOSITE IS RECOMMENDED TO BE CARRIED OUT:

- a) in layers
- b) one or two portions, carefully pressing the material to the bottom and walls of the cavity, with some excess material
- c) in small portions with careful condensation of each portion
- d) application technique does not matter

64. SPECIFY THE FINAL STAGE OF THE FINAL PROCESSING OF THE RESTORATION:

- a) contouring of the restoration
- b) finishing the restoration
- c) polishing with pastes
- d) processing with carborundum stone

65. MAIN FORM OF PRODUCTION OF MODERN COMPOSITE MATERIALS OF CHEMICAL CURING:

- a) pasta
- b) powder-liquid
- c) paste-powder
- d) paste-liquid

66. MICRORETENTION OF THE FILLING MATERIAL IS

- a) fixation of the filling due to the convergence of the walls of the carious cavity
- b) fixation of the filling material in the retention points
- c) penetration of the adhesive and filling material into the microspaces of the etched enamel
- d) fixing the seal due to anchors, pins, posts

67. FLUID LIGHT-CURING COMPOSITES ARE:

- a) Revolution
- b) Tetric
- c) Dyract

d) Fuji IX

68. ACTION OF DENTINE ADHESIVE ON DENTIN

- a) increases the flow of dental cerebrospinal fluid
- b) fills the dentinal tubules
- c) stops the flow of dental cerebrospinal fluid
- d) wets and disinfects
- e) true c) and d)

69. A BRILLIANT, "MOIST", EASILY REMOVABLE LAYER ON THE SURFACE OF THE COMPOSITE IS CALLED:

- a) smear layer
- b) layer inhibited by oxygen
- c) hybrid layer
- d) insulating layer

70. LIST THE MOST COMMON MISTAKE WHEN USING COMPOSITE MATERIALS:

- a) the use of microfilled composites for the restoration of surfaces of 1.2 classes, the cutting edges of the anterior teeth
- b) ignoring the rules for directing the rays of a polymerization lamp
- c) contact with the glued surface of the oral or gingival fluid
- d) true b, c
- d) everything is correct

71. 5th GENERATION ADHESIVE SYSTEMS CONTAIN PRIMER AND ADHESIVE:

- a) in the form of two liquids
- b) do not contain a primer
- c) in "one" vial
- d) do not contain adhesive

72. TOTAL ETCHING IS RECOMMENDED FOR SUBSEQUENT USE OF ADHESIVE SYSTEMS:

- a) 3 generations
- b) 4-5 generations
- c) 1st generation
- d) 2 generations

73. INSULATING VARNISHES ARE THIN-LAYER GASKETS INTENDED TO PROTECT THE TOOTH PULP FROM THE TOXIC EFFECT OF FILLING MATERIALS, OTHERWISE THEY ARE CALLED:

- a) primers
- b) silanes
- c) compomers
- d) sealants
- e) liners

74. LIST THE ADVANTAGES OF PHOTOCOMPOSITE FILLING MATERIALS:

- a) matching the color and transparency of the enamel and dentin of the tooth
- b) color fastness
- c) enough time to model the restoration
- d) everything is correct

75. INDICATIONS FOR THE USE OF COMPOMERS:

- a) carious cavities of 3 and 5 classes
- b) small carious cavities of 1 and 2 classes
- c) non-carious lesions of hard dental tissues
- d) all of the above are true

76. When filling carious cavities using the "open sandwich" method, a gasket:

1. covered with composite
2. not covered by composite

3. superimposed on the bottom and walls
  4. superimposed on the edges of the cavity
  5. applied to walls and edges
77. Shrinkage of the light-cured composite occurs to the side:
1. light source
  2. tooth cavity
  3. vestibular
  4. oral
  5. occlusal
78. THERAPEUTIC PADDING IS APPLIED:
- a) pointwise in the projection area of the pulp horn
  - b) on the bottom and walls of the carious cavity, repeating the contours of the cavity
  - c) on the bottom of the cavity to the enamel-dentin border
  - d) on the walls of the carious cavity
79. MEDICAL PADS:
- a) calcicur
  - b) calcipulp
  - c) septocalcin
  - d) all of the above are true
80. FOR TREATMENT OF A CARIOUS CAVITY IT IS NOT RECOMMENDED TO USE:
- a) dioxidine
  - b) alcohol
  - c) sodium hypochlorite
  - d) hydrogen peroxide
81. The opening of the tooth cavity in the premolars of the upper jaw is carried out with a bur in the direction:
- a) anterior-posterior
  - b) along the axis of the tooth
  - c) buccal-palatal
  - d) bucco-posterior
  - e) anterior-buccal
82. Opening of the tooth cavity is carried out:
- a) finisher
  - b) carborundum head
  - c) fissure bur
  - d) spherical bur No. 1
  - e) disk
83. Arsenic paste (g) is sufficient for pulp necrosis:
- a) 0.0008
  - b) 0.001
  - c) 0.01
  - d) 0.1
  - e) 1.0
84. When filling the root canal, use the tool:
- a) H-file
  - b) spreader
  - c) sweep
  - d) pulp extractor
  - e) pin
85. For antiseptic treatment of the root canal, the following is used:
- a) maleic acid
  - b) distilled water



- c) 37% phosphoric acid
  - d) 3% sodium hypochlorite
  - e) nitric acid
86. Determination of the working length of the tooth is carried out by the method:
- a) radiography
  - b) subjective feelings
  - c) thermodiagnosics
  - d) electroodontodiagnosics
  - e) ultrasonic
87. Devitalizing effect has:
- a) zinc eugenol paste
  - b) paraformaldehyde paste
  - c) resorcinol-formalin liquid
  - d) cresophene
  - e) camphor-phenol
88. Opening of the tooth cavity of intact premolars of the upper jaw is performed:
- a) in the middle of the longitudinal fissure
  - b) in the region of the buccal tubercle
  - c) in the region of the palatine tubercle
  - d) in the cervical region
  - e) from the vestibular side
89. The modern way of root canal filling is:
- a) method of lateral condensation of gutta-percha
  - b) application of one paste
  - c) the use of phosphate cement
  - d) the use of a silver pin
  - e) application of gutta-percha without sealer
90. Indications for impregnation methods are:
- a) well-traversed channels
  - b) channels in the stage of resorption of the apical part
  - c) poorly passable and obliterated canals
  - d) canals of single-rooted teeth
  - e) inflammation in the periodontium
91. The first step in the instrumental expansion of the root canal is:
- a) antiseptic treatment
  - b) expansion of the apical foramen
  - c) determining the length of the root canal
  - d) expansion of the mouths of the root canal
  - e) use of H-files
92. Number and name of root canals in the first upper molars:
- a) 2-buccal, palatine
  - b) 3 - palatine, anterior-buccal, posterior-buccal
  - c) 3 - posterior, anterior-lingual, anterior-buccal
  - d) 3 - palatine, anterior-lingual, posterior-lingual
  - e) 5 - anterior, posterior-buccal, palatine
93. WHEN WORKING WITH A HEADSTREAM FILE (DRILL), IT IS REQUIRED:
- a) insert the instrument into the canal by rotating until it stops
  - b) carry out scraping movements from the top to the mouth of the canal
  - c) at minimum pressure, insert the instrument into the canal and rotate it clockwise
  - d) everything is correct
94. FEATURES OF THE NEEDLE OF THE ENDODONTIC SYRINGE IS:
- a) the needle has a flat cut on the side surface

- b) the needle has several exit holes at the end
- c) the needle has a sharp end
- d) all of the above are true

95. SPECIFY REQUIREMENTS FOR PREPARATIONS FOR MEDICATIONAL TREATMENT OF ROOT CANALS:

- a) should not irritate periodontal tissues
- b) must have a bactericidal effect on microorganisms
- c) must be capable of deep diffusion into the dentinal tubules
- d) all of the above are true

100. ENDODONTIC INSTRUMENT BREAKAGE IN THE ROOT CANAL LEADS

- a) no x-ray of the tooth
- b) work in a wet channel
- c) repeated sterilization of the instrument
- d) all of the above are true

101. SODIUM HYPOCHLORITE CONCENTRATION FOR ROOT CANAL TREATMENT:

- a) 6% solution
- b) 2.5-3% solution
- c) 0.06% solution
- d) 10% solution

102. HYDROGEN PEROXIDE CONCENTRATION FOR ROOT CANAL TREATMENT:

- a) 3% solution
- b) 6% solution
- c) 0.03% solution
- d) 10% solution

103. REQUIREMENTS FOR MATERIALS FOR ROOT CANALS

- a) do not irritate periodontal tissues
- b) have a long curing time
- c) have a chemical bond with dentin
- d) all of the above are true

104. PLUGGER USE:

- a) for lateral condensation of gutta-percha pins
- b) for vertical condensation of gutta-percha pins
- c) for the introduction of the sealer
- d) all of the above are true

105. The opening of the tooth cavity in the molars of the lower jaw is carried out with a drill in the direction:

- a) buccal-lingual
- b) along the axis of the tooth
- c) anterior-posterior
- d) posterior-lingual
- e) posterior buccal

106. Arsenic paste of the classic recipe in 3.7 tooth is superimposed on the time:

- a) 24 hours
- b) 48 hours
- c) 3 days
- d) 5-6 days
- e) 7 days

107. It is recommended to remove infected predentin from the walls of the canal of the tooth:

- a) root needle
- b) pulp extractor
- c) K-file
- d) channel filler

- e) excavator
- 108. Devitalizing effect has:
  - a) zinc eugenol paste
  - b) paraformaldehyde paste
  - c) resorcinol-formalin liquid
  - d) cresophene
  - e) camphor-phenol
- 109. Opening of the tooth cavity of intact central incisors is performed from the oral surface at the level of:
  - a) cutting edge
  - b) the upper third of the crown
  - c) middle third of the crown
  - d) lower third of the crown
  - e) neck of the tooth
- 110. In the treatment of pulpitis by the method of devital extirpation, the following is performed on the first visit:
  - a) opening of the tooth cavity
  - b) removal of coronal pulp
  - c) removal of root pulp
  - d) opening the cavity of the tooth
  - e) full endodontic treatment
- 111. The mouths of the channels determine:
  - a) periodontal probe
  - b) excavator
  - c) spherical bur
  - d) endodontic probe
  - e) scanner
- 112. The working length of the root canal is determined by:
  - a) according to the subjective feelings of the doctor
  - b) according to the patient's feelings
  - c) orthopantomogram
  - d) x-ray with a needle
  - e) EDI
- 113. Preparations based on EDTA mainly act in the environment:
  - a) sour
  - b) alkaline
  - c) neutral
  - d) sodium hypochlorite
  - e) salty
- 114. IN THE PROCESS OF MEASURING THE LENGTH OF THE ROOT, TO AVOID ERRORS, IT IS NECESSARY:
  - a) exclude contact of the active electrode with metal (crown, amalgam filling)
  - b) avoid contact of the electrode with saliva
  - c) remove the pulp from the canal
  - d) everything is correct
- 115. FLEXIBILITY AND HIGH CUTTING ABILITY OF DRILLS (K-REAMER) DUE TO:
  - a) elongated step of the cutting edge
  - b) shortened step of the cutting edge
  - c) the presence of a spiral cutting edge
  - d) the presence of teeth located at right angles to the axis of the tool
- 116. EXPANSION OF THE ROOT CANAL FROM SMALLER TO BIGGER IS:

- a) Step Back technique
- b) CrownDown method
- c) the technique of balanced forces
- d) standard method

117. FOR THE PASSAGE OF THE UPPER THIRD OF THE PALATINE CANAL IN THE UPPER AND BACK CANAL IN THE LOWER MOLAR USE:

- a) Largo
- b) Gates Glidden
- c) sweep
- d) all of the above are true

118. PLUGGER USE:

- a) for lateral condensation of gutta-percha pins
- b) for vertical condensation of gutta-percha pins
- c) for the introduction of the sealer
- d) all of the above are true

119. WHAT INSTRUMENT IS USED FOR OBTURATION OF ROOT CANALS WITH GUTTA PERCHA

- a) root plugger
- b) K-file
- c) sweep
- d) spreader

120. ROOT CANAL FILLING METHOD WITH ONE PASTE:

- a) guarantees complete obturation of the root canal up to the apical foramen
- b) does not guarantee complete obturation of the root canal to the apical foramen
- c) a high risk of removing the paste beyond the apical foramen
- d) high risk of breakage of the channel filler

121. ERRORS IN ROOT CANAL FILLING WITH CANAL FILLER:

- a) the canal filler is removed from the apical hole
- b) the channel filler is introduced into the channel in working condition
- c) work at high speeds
- d) everything is correct

122. PERFORATION OF THE BOTTOM OF THE TOOTH CAVITY IS REMOVED BY FILLING:

- a) JIC
- b) zinc phosphate cement
- c) medical pad
- d) flowable composite

123. REMOVING THE FILLING MATERIAL OUTSIDE THE TOP OF THE TOOTH ROOT MAY BE ACCOMPANIED WITH:

- a) pain sensations
- b) the exit of the material through the fistulous passage
- c) the occurrence of paresthesia
- d) everything is correct

124. TO DETERMINE THE STATE OF THE PULP ALLOWS:

- a) electroodontodiagnostics
- b) dye tests
- c) percussion
- d) all of the above are true

125. Opening of the tooth cavity of the intact second premolar of the lower jaw is performed in the area:

- a) the middle of the longitudinal fissure
- b) buccal tubercle

- c) lingual tubercle
  - d) posterior third of the longitudinal fissure
  - e) anterior third of the longitudinal fissure
126. The advantage of root canal filling using the Thermafil system is:
- a) a short period of plasticity
  - b) three-dimensional canal obturation
  - c) pain sensations
  - d) removal of material beyond the top
  - e) periodontal trauma
127. An error in endodontics at the stages of diagnosis is:
- a) incorrect interpretation of radiographs
  - b) insufficient sealing of the devitalizing paste
  - c) displacement of arsenic paste when applying a bandage
  - d) closing the arsenic paste with oily dentin
  - e) perforation
128. A complication in endodontic treatment is:
- a) breakage of the instrument in the canal
  - b) creating an apical stop
  - c) filling the root canal to the physiological opening
  - d) creating a taper of the channel
  - e) channel expansion
129. An error in the treatment of pulpitis with a biological method is:
- a) opening the cavity of the tooth
  - b) the imposition of medical pads
  - c) complete removal of necrotic dentin
  - d) opening of the carious cavity
  - e) formation of a carious cavity
130. The method of complete preservation of pulp viability is:
- a) vital extirpation
  - b) vital amputation
  - c) biological method
  - d) devital extirpation
  - e) devital amputation
131. APEX LOCATION METHOD RELATES TO:
- a) electrometric method for determining the length of the channel
  - b) X-ray method for determining the length of the canal
  - c) method for determining the length of the channel using calculated data
  - d) method for determining the length of the channel with densitometry
132. WHAT INSTRUMENT IS DISPOSABLE:
- a) pulp extractor
  - b) drillbor
  - c) channel filler
  - d) root needle
133. SODIUM HYPOCHLORITE CONCENTRATION FOR ROOT CANAL TREATMENT:
- a) 6% solution
  - b) 2.5-3% solution
  - c) 0.06% solution
  - d) 10% solution
134. ROTATING NICKEL-TITANIUM ENDODONTIC INSTRUMENTS ARE:
- a) Profile
  - b) Reamer
  - c) K3File

- d) Protaper
- e) all are true except b)

135. TIME PROFILE IN THE CHANNEL:

- a) 20-30 seconds
- b) 1 minute
- c) 5-10 seconds
- d) 2-3 minutes

136. The main disadvantage of plastic non-hardening materials for root canals is:

- a) anti-inflammatory action
- b) bactericidal action
- c) resorption in the root canal
- d) stimulation of reparative processes
- e) anti-exudative action

137. FACTORS LEADING TO THE BREAK-OFF OF AN ENDODONTIC INSTRUMENT IN THE ROOT CANAL:

- a) non-compliance with the limiting angles of rotation
- b) no direct access to the channel
- c) absence of a control x-ray
- d) a, b are correct

138. TO IDENTIFY A SITE OF ENAMEL DEMINERALIZATION ALLOWS:

- a) dye test
- b) electroodontodiagnostics
- c) temperature diagnostics
- d) all of the above are true

139. LUMINESCENT DIAGNOSTICS IS BASED ON:

- a) on the glow of hard tissues under the influence of green light
- b) on the ability of fabrics to emit light of a certain color when exposed to ultraviolet rays
- c) on the determination of the threshold excitation of pain and tactile receptors of the pulp when irritated by an electric current
- d) all of the above are true

140. TRANSILLUMINATION IS AN ADDITIONAL DENTAL EXAMINATION METHOD BASED ON:

- a) on the glow of hard tissues under the influence of green light
- b) on the ability of fabrics to emit light of a certain color when exposed to ultraviolet rays
- c) on the determination of the threshold excitation of pain and tactile receptors of the pulp when irritated by an electric current
- d) all of the above are true

141. RESORCIN-FORMALIN METHOD IS INTENDED:

- a) to devitalize the dental pulp
- b) for chemical treatment of root canals
- c) for root canal impregnation
- d) all of the above are true

142. ERRORS IN ROOT CANAL FILLING WITH CANAL FILLER:

- a) the canal filler is removed from the apical hole
- b) the channel filler is introduced into the channel in working condition
- c) work at high speeds
- d) everything is correct

143. PERFORATION OF THE BOTTOM OF THE TOOTH CAVITY IS REMOVED BY FILLING:

- a) JIC
- b) zinc phosphate cement
- c) medical pad

d) flowable composite

144. When filling the root canal, use the tool:

a) H-file

b) spreader

c) sweep

d) pulp extractor

e) pin