

**MINISTRY OF PUBLIC HEALTH
HIGH STATE EDUCATIONAL ESTABLISHMENT OF UKRAINE
«UKRAINIAN MEDICAL STOMATOLOGICAL ACADEMY
POLTAVA**

«Recommended»

at the meeting of Department of
Pediatric Therapeutic Stomatology
with Dental Diseases Prevention methodical
Head of the Department
Professor Kaskova L.F.

„_____” _____ 201_ y.

«Ratification»

Wise – prorector
on the scientific and pedagogical
work in the HSEI Ukraine «UMSA»
prof. _____ Bobbyrev V.N.
" ____ " _____ 201_y.

PROPAEDEUTICS OF PEDODONTICS

REFERENCE BOOK

FOR THE FOREIGN STUDENTS IN STUDYING

«PROPAEDEUTICS OF PEDODONTICS»

(Structure, aims, subject content, principles of estimation, control questions)

Specialty: 7.110106 «Dentistry»

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Normative subject

PROPAEDEUTICS OF PEDODONTICS – it's an educative discipline which make a conditions for the students to master special skills connected with treatment of caries and it complications in the primary and permanent teeth realized on phantoms. Acquisitoned practical skills and ability like this they'll use in the future practical work with patients. Students acquainted with period of teeth development, formation and root resorption in primary teeth in children, master the basic manipulation as preparation and filling of caries cavities, endodontic treatment in the dental roots canals in primary and permanent teeth in different stages of development.

- Lectures – 8 hours,
- Practical lessons – 30 hours,
- Self- independent work of the students – 52 hours.

Subject consisted of 1 module and 4 contents modules.

2. Subject structure of «PROPAEDEUTICS OF PEDODONTICS» and extra changing of the scores for line educative activity (traditional marks were converted in scores; marks in scores for fulfill of individual tasks).

№ of module and quantity of educational hours, quantity of credits ECTS	Quantity of content module	Quantity of practical lessons	Traditional marks were converted in scores				Scores for the self - independent work of the student (SIWS)	Minimal quantity of scores
			Traditional marks					
Module 1. 90/3,0 credits	4 № 1-4	№ 15	«5»	«4»	«3»	«2»	10	72
Students which have 72 scores take a permeation to pass the concluding control test. 10 scores added for the self -independent work.								

3. Finish aims in studying educative discipline «PROPAEDEUTICS OF PEDODONTICS» accordant to the enlightenment and professional program (EPP):

Block PP.0088

Medical specialist must demonstrate knack of skills moral and deontological principles for and professional subordination in the clinic of Pediatric Therapeutic Dentistry:

- It should be remembered moral and esthetic and professional rules during activity of pediatric dentist;
- Medical specialist must carry out the moral and deontology principles and professional subordination rules in the clinic of pediatric dentistry;
- It to able to get right contact among colleagues, children – patients, their parents and pay attention to the psychology statues;
- It should be promoted health psychology microclimate in work collective and learning justice rules about relation between pediatric dentist and children – patients;

Block PP.00103. Demonstrate treatment manipulation in children teeth using phantoms:

- Preparation of caries cavities in the primary and permanent teeth for different kind of filling materials;
- Filling of caries cavities in the primary and permanent teeth different kind of filling materials;
- Polishing of grinding of the seals made at different kind of materials recommended for pediatric practice;
- Fill in and remove the temporary and hermetic bandage using for treatment of caries and pulpitis, periodontitis in the children;
- Carry out the impregnation of the hard tissues in the primary teeth;
- Cover the caries cavity with odontotropic past;
- Make the impregnation of root canals;
- Make instrumental treatment of root canal in the primary and permanent teeth;
- Filling root canals with different filling materials in primary and permanent teeth;

Block PP. 00105.

Demonstrate on the phantoms practical skills with main dental instruments, materials and dental equipment using in the Pediatric Dentistry:

- Acquaintance with the structure of pediatric dental cabinet, department, clinic;
- To be able to use the dental equipment in pediatric dental clinic;
- To study the main dental instruments used in pediatric dental examination;
- To study the classification of dental filling material, root filling material recommended for the children;
- Determine the main demands to dental material, their features and indication of application in pediatric clinic.

Block PP.0069.

Distinguish the particulars of use aseptic and antiseptics principles in clinic of pediatric therapeutic dentistry:

- To study modern demands to sterilization of the instruments in clinic of pediatric dentistry;
- Follow the aseptic and antiseptics rules in the pediatric practice;
- To master the efficiency of sterilization and its control norms;
- Determine the preventive method for warning of infection transmission in the children establishment.

4. The description of subject modules.

Module 1. «PROPAEDEUTICS OF PEDODONTICS».

4.1. THEMATIC PLAN OF THE LECTURES.

N	Themes	Quantity of hours
1	Anatomic-morphologic, histological, roentgenologic features of dental-maxillary system at the children of different age.	2
2	The particulars of preparation of hard dental tissue at the children. The main physical-chemical and biological features of filling of caries cavities and roots at the children.	2
3	The modern endodontics instruments. Classification, indications, technique of application. The principles of endodontics treatment using in pediatric dentistry.	2
4	The filling of root canals in temporary and permanent teeth at the children. The kinds of root seals. Indications and technique of application.	2
	Whole hours	8

4.2. THEMATIC PLAN OF PRACTICAL LESSONS

№	Subject of practical lesson	Number of hours
Module 1: Propaedeutic of children's therapeutic dentistry.		
Content module 1. <i>The main dental tools and equipment. The anatomical structure of temporary and permanent teeth.</i>		
1.	Getting to know the structure of the departments of s. Briefing on safety at work in the dental office. Organization and equipping of	2

	dental surgeries. The main tools for dental therapeutic care: kinds, indications. Aseptics, antiseptics. Cleaning, disinfection, sterilization of dental instruments. Making phantoms.	
2.	Topographic anatomy of deciduous teeth and the permanent teeth at different stages of development. Simulation of the teeth and hard plastic materials. Modeling teeth from plastic and hard materials. Control content module 1.	2
Content module 2. <i>Preparation of cavities in temporary and permanent teeth in children.</i>		
3.	Classification of cavities by Black. Preparation of cavities: the rules, principles, methods, stages. Preparation of cavities class I for Black in temporary and permanent teeth, taking into account the period of tooth development. The choice of instruments.	2
4.	Preparation of cavities class II for Black in temporary and permanent teeth, taking into account the period of tooth development. The choice of instruments.	2
5.	Preparation of cavities class III Black temporary and permanent teeth, taking into account the period of tooth development. The choice of instruments.	2
6.	Preparation of cavities class IV Black in temporary and permanent teeth, taking into account the period of tooth development. The choice of instruments.	2
7.	Preparation of cavities class V Black for temporary and permanent teeth, taking into account the period of tooth development. The choice of instruments. Control Content module 2.	2
Content module 3. <i>Filling cavities in temporary and permanent teeth in children.</i>		
8.	Dental cements and amalgam. Composite filling materials and compomers. Technique filling cavities I and V classes in temporary and permanent teeth	2
9.	Equipment seals the cavities of class II in temporary and permanent teeth in children with different filling materials Restoring contact	2

	point	
10.	Equipment seals the cavities of classes III and IV in temporary and permanent teeth in children with different filling materials. Substantial control module 3	2
Content module 4. <i>Instrumental, drug treatment and root canal filling in temporary and permanent teeth in children.</i>		
11.	Endodontic. The goal, objectives, stages of endodontic treatment. Topography cavities of temporary and permanent teeth in children. Tooth cavity preparation techniques in a variety of group affiliation of temporary and permanent teeth. Modern endodontic instruments: Classification, purpose and use of appliances.	2
12.	Technique instrumental and medication of root canal treatment in temporary and permanent teeth, taking into account the period of development of the tooth root. Impregnation techniques of root canal treatment.	2
13.	Filling materials for temporary and permanent root canal obturation. Technique root canal filling in temporary teeth.	2
14.	The root filling. Technique filling root canals in permanent teeth at different stages of their development. Control of content module 4.	2
15.	Final control module 1.	2

4.3. THEMATIC PLAN OF THE SELF-INDEPENDENT WORK

№	Kind of self – independent work	Quantity of hours	Kind of control
1.	Preparation for the practical lessons – theoretical preparation and keep the practical skills numbers of the themes: 1 – 14 (14 x 1,5 hour).	14	Line production control
2.	Preparation for the control test mastering content modules - theoretical preparation and keep the practical skills numbers of the themes: 2, 7, 10, 14 (4 x 3 hour).	12	Line production control
3.	Self – independent learning of the themes which didn't include in the plan of auditory lessons,	10*	

	numbers of the themes: 1-7 (7x1 hours).		
	III semester		
	1. Modern conceptions of caries cavities preparation: preparation principles according to Black, Lukomsky, Monty prepare for the preventive filling.	1	Conclusion module control
	2. Alternative methods using for remove the demineralized dental hard tissues (chemical and mechanical preparation of caries cavities at children, ART - method)	1	Conclusion module control
	3. The features of caries cavities preparation according to choice of filling materials (amalgam, composite materials, compomer, cements, glassionomer cements)	1	Conclusion module control
	4. The physical and chemical features of the modern glassionomer cements. Hybrid and strengthening include the silver GIC. Technique of application the GIC.	1	Conclusion module control
	5. The physical and chemical features of the modern resins and compomers. Technique of using in primary and permanent teeth.	1	Conclusion module control
	VII semester		
	6. Adhesive systems, indications. Types, content, features, technique of using.	1	Conclusion module control
	7. Impregnation method using for the treatment of dental hard tissues. Indications, methods of application.	1	Conclusion module control
	8. Finishing polishing of the seals made at different filling materials: choice the instruments, accessories, technique of application	1	Conclusion module control
	9. Technique instrumental and medication of root canal treatment in temporary and permanent teeth, taking into account the period of development of the tooth root. Impregnation techniques of root canal treatment.	1	Conclusion module control
	10. Gutta percha points. The methods of application. Modern technique of roots canals filling with cold, hot, warm up and thermoplastificated gutta percha	1	Conclusion module

			control
4.	Individual-research self-independent work	6*	
5.	Preparation for the conclusion control test learning. The module 1, numbers of the lesson – 10.	10	Conclu sion module control
	Whole the hours	52	

Note: * - independent learning is carried out by students with writing notes and abstracts which submitted by a teacher.

4.4. PLAN OF THE INDIVIDUAL WORK

1. Prepare the review of scientific literature accordant to the topic in studying.

2. Conduct scientific research by the topic:

- Estimate the expansion of caries process by the results of hospital case histories (account the localization of cavities accordant to the Black's classification);

- Reveal the relation between caries expansion and depth of the caries lesion by the results of hospital case histories;

3. Write down the review and elect the themes:

- Pediatric Dentistry in Ukraine. The history of the Pediatric Therapeutic Stomatology department with Dental Diseases Prevention HSEI Ukraine «UMSA».
- Organization of the work in Pediatric Dental Hospital;
- The treatment of the dental instrument and equipment;
- The demands to the individual hygiene of medical personal of stomatological section;
- Development of the primary teeth;
- Development of the permanent teeth;
- The structure and function of organs and tissues of oral cavity;
- The objects for the isolation of operation field at saliva;
- The instruments using for the preparation of caries cavity;
- The polish instruments using for the seals.
- The technique of esthetic restoration with chemical hardening material in permanent teeth. Visual features dental hard tissues for permanent teeth in children and teenagers.
- The materials used for the direct and indirect capping of the pulp, it physical and chemical features. Indication of application. Technique of application.
- The modern photopolymerization lamps: kinds, prescription, the control of lamp capacity.

- The defense means used for dentist and patients.
- The root seals for Zn- eugenol and calcium – containing pasts.
- The physical and chemical features. Indication of application.
- The modern roots filling materials used for permanent teeth.
- The calcium – containing preparations, light – hardening glass ionomer and Zn-eugenol materials. Indication of application. Technique of application.
- Adhesive systems and its application in the stomatological practice. Kinds, composition, technique of application.

4.5. THE ESTIMATION OF THE STUDENT EDUCATIVE ACTIVITY.

ESTIMATION OF EDUCATIVE SUBJECT (the order, methods, the means and criteria's of estimation for following educative activity, carry out the concluding control tests, the estimation of the subject in whole.

The marks are converted accordant with traditional forth – scores schedule to multiscores (maximum 120 scores). The current individual module successfulness it's necessary to convert after concluding control lesson.

The algorithm of marks conversion:

- a) The average mark (current general module successfulness of the student) calculated accordant with traditional forth – scores schedule to multiscores. The scores count with one hundred of mark;
- b) general module successfulness of the student contains the estimation of the self - independent work in average mark;
- c) The average marks of current module successfulness accordant with traditional forth – scores schedule multiplied on coefficient 24 it's a get to conversed multicores average mark.

The concluding control module have to pass if the minimal scores of current general module successfulness are 3,0. The “2” mark didn't have to retake if the average mark of current general module successfulness more than 3,0 scores, but student has a chance to retake a bad mark. Student has a chance to retake a bad mark all the years during a studying of «Paediatric Dentistry» but before a date of concluding control module. Its connected with the student who have an average marks 3,0 and more scores. The student should to retake the bad marks before begging of a new semester in that case when an average marks less 3,0 scores. The student automatically passed the concluding module control if the he has 72 scores for the current general module successfulness within limits in 50-70 scores accordant to the rating principle (table 1.).

Table 1. The average scores of current module successfulness accordant with traditional forth – scores schedule corresponded to total marks current module successfulness and scores conversion for the current successfulness to rating indicator of CMC.

Average scores of the current successfulness accordant with traditional	Total scores for current successfulness after conversion of the	Rating indicator of CMC
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forth – scores	average scores	
2,00	0	Didn't have a permission to CMC
2,05	49	Didn't have a permission to CMC
2,10	50	Didn't have a permission to CMC
2,15	52	Didn't have a permission to CMC
2,20	53	Didn't have a permission to CMC
2,25	54	Didn't have a permission to CMC
2,30	55	Didn't have a permission to CMC
2,35	56	Didn't have a permission to CMC
2,40	58	Didn't have a permission to CMC
2,45	59	Didn't have a permission to CMC
2,50	60	Didn't have a permission to CMC
2,55	61	Didn't have a permission to CMC
2,60	62	Didn't have a permission to CMC
2,65	64	Didn't have a permission to CMC
2,70	65	Didn't have a permission to CMC
2,75	66	Didn't have a permission to CMC
2,80	67	Didn't have a permission to CMC
2,85	69	Didn't have a permission to CMC
2,90	70	Didn't have a permission to CMC

2,95	71	Didn't have a permission to CMC
3,00	72	50
3,05	73	50
3,10	74	51
3,15	75	51
3,20	77	52
3,25	78	52
3,30	79	53
3,35	80	53
3,40	82	54
3,45	83	54
3,50	84	55
3,55	85	55
3,60	86	56
3,65	87	56
3,70	89	57
3,75	90	57
3,80	92	58
3,85	93	58
3,90	94	59
3,95	95	59
4,00	96	60
4,05	97	60
4,10	98	61
4,15	99	61
4,20	101	62
4,25	102	62
4,30	103	63
4,35	104	63
4,40	106	64
4,45	107	64
4,50	108	65
4,55	109	65
4,60	110	66
4,65	111	66
4,70	113	67

4,75	114	67
4,80	115	68
4,85	116	68
4,90	118	69
4,95	119	69
5,00	120	70

Control module control is conducted at the finish lesson and realized accordant to the time – table (student has a permission to pass of concluding module).

The scores for the self-independent work (till 10 scores) pluses to rating indicator of CMC, this sum consist with quantity of scores for CMC (more than 80).

The module is passes if the student passed CMC in time (accordant to the time – table) and rework all missing lessons and lectures and got 3,0 scores as an average scores for current module successfulness (table 1.).

The term for debt liquidation of module

The credit and examination week is intends for debt liquidation of module after finish of studying subject.

The students are expelled from an academy if he didn't pass the CMC. The dean's office determined the reason of missing as “reasonable excuse” and gets permission for the student individual graphic with the leave of rector or vice – pro-rector of academy.

The department given a subject marks accordant to traditional forth – scores on the base ground of average quantity of scores including all the module under the discipline program.

Evaluation of the discipline is only written if the student is enrolled the module.

Discipline mark is written no later than next work day after the last final module control.

Scale transfer of the average number of points for all modules provided by the program for the discipline in the traditional assessment on a 4-point scale for all 16 departments is unified (according to the table).

The schedule of conversion average scores including all the module under the discipline program accordant to traditional forth – scores is single for all the department (table 2.):

The average scores including all the module scores under the discipline program	Traditional marks accordant to traditional forth – scores schedule
122 – 139,99	3
140 – 179,99	4
180 – 200	5

The subject marks isn't converted to ECTS.

The student who had passed successfully all kind of concluding control tests has a chance to increasing the mark according to traditional forth – scores schedule and ECTS marks of the discipline with the leave of rector or vice – pro-rector of academy (it isn't more than 3 CMC during all time of education) and only in graduation course.

The control module test was passed by the subject of «Pediatric Dentistry» if the student attended of the full lectures course and practical lessons. The CMC is passed at the finish practical lesson of semester according to the time-table.

The result of the concluding module control is estimated in the scores (traditional forth-scores marks didn't use). Maximal quantity of scores for the concluding module control is 80 scores. Minimal quantity of scores for the concluding module control is 50 scores (the module is passed).

The concluding module control carries out after finish of subject studying.

Marks:

- **“Excellent”** (12 scores) – a student mastered theoretical material according to themes, used accumulated knowledge to answer the questions according to the theme, motivated her answer; stood the practical skills by the theme; solve the control tasks and made explanation of decision;
- **“Good”** (8 scores)– a student mastered theoretical material by the themes, used accumulated knowledge to answer the questions according to the theme, but has some difficult motivated her answer; stood the practical skills by the theme; may solve the control tasks and made explanation of decision;
- **“Satisfactory”** (4 scores) – a student hasn't mastered theoretical material enough by the themes and has difficult to applied her knowledge, didn't motivate her answer; it wasn't enough study the practical skills by the theme; has a some problems during the solve the control tasks and made explanation of decision;
- **“Unsatisfactory”** (0 scores) – a student mastered a minimum of knowledge foreseen by a program. Student hasn't mastered theoretical material according to themes, can't use accumulated knowledge to answer the questions according to the theme, can't motivate her answer; didn't study the practical skills by the theme; didn't solve the control tasks and made explanation of decision.

Estimation method of the following educative activity.

Theoretical knowledge:

1. The control test.
2. Individual oral tests.
3. Situation tasks solution.
4. Writing theoretical control test.

Practical tasks:

1. Individual control of the practical skills and checked it results at the phantom.

The method of the control module test realization (MCMTR):

1. The control test .
2. Individual oral tests.
3. Individual control of the practical skills and checked it results at the phantom.

The control module test was passed by the subject of «Propaedeutics of Pedodontics» if the student attended of the full lectures course and practical lessons.

The MCMTR is passed at the finish practical lesson of semester accordant to the time-table.

The control module test by the subject of «Propaedeutics of Pedodontics» consists with the control test of second level, individual oral tasks and individual control of the practical skills and checked it results at the phantom.

Control test of the second level provides the writing solve of 40 test tasks connected with different units of the «Propaedeutics of Pedodontics» course (40 minutes is duration of writing test).

The estimation of the control test:

61-70% (24-28 correct answers) – 30 scores;

71-80% (29-32 correct answers) – 35 scores;

81% and more than (33 and more than answers) – 40 scores.

Student doesn't have a permeation to pass the control test if he took wrong answers more than 61% test tasks. Minimal quantity of scores is 30 if the student put correct answers for 61% of test tasks.

Individual oral test provides corresponding to list of the theoretical questions for control module test. Minimal quantity of scores completes 10 scores for two correct theoretical answers to the questions.

Individual control of the practical tasks and checked it results at the phantom consist with demonstration of one practical skills on phantom represented in the list of the practical skills for control module test by the subject of «Propaedeutics of Pedodontics». Minimal quantity of scores completes 10 scores for correct representation of practical manipulation.

Final control module was accounted if a student accumulated minimal quantity scores at the finish of module – 50 scores. Maximal quantity scores – 80 scores.

Personal estimation of the control module is sum of scores for following control, final control module an individual work.

The student educative activity has estimated as an average mark after studying of following concluding models accordant with rating and multilevel scale and determinate with system of ECTS and traditional scale adopted in Ukraine.

4.6 LIST OF THE THEORETICAL QUESTIONS TO THE FINAL CONTROL MODULE 1.

1. Stomatological instruments for therapeutic reception: kinds, appointments.

2. Basic stomatology equipment. Sanitary-hygienic requirements for the organization of dental surgery. Main rules of technique of safety work (precautions regulations of work) in the dental surgery.
3. Aseptic and antiseptics: definition, methods. The basic stages of cleansing the stomatological instruments.
4. Disinfection: definition, methods, remedies.
5. Presterilizing cleaning stage: methods, facilities, check of quality.
6. Sterilization: definition, methods, regimes, remedies, check of quality.
7. The development periods of deciduous and permanent teeth.
8. Foundation terms, mineralization and eruption of deciduous teeth.
9. Foundation terms and resorption of the roots in deciduous teeth. Kinds and types of resorption of roots in the deciduous teeth. Describe the radiological (X-ray) characteristics.
10. Foundation terms and resorption of the roots in permanent teeth. Kinds and types of resorption of roots in the deciduous teeth. Describe the radiological (X-ray) characteristics.
11. Signs of accessory tooth for the side of jaw.
12. Describe anatomic structure of deciduous incisors and canines of maxilla and mandible.
13. Describe anatomic structure of the first deciduous molars of maxilla and mandible.
14. Describe anatomic structure of the second deciduous molars of maxilla and mandible.
15. Describe anatomic structure of permanent incisors of maxilla.
16. Describe anatomic structure of permanent incisors of mandible.
17. Describe anatomic structure of permanent canines of maxilla and mandible.
18. Describe anatomic structure of permanent premolars of maxilla.
19. Describe anatomic structure of permanent premolars of mandible.
20. Describe anatomic structure of the first permanent molar of mandible and maxilla.
21. Describe anatomic structure of the second permanent molar of mandible and maxilla.
22. Anatomy-morphological differences between the deciduous and permanent teeth.
23. Black's classification of caries cavities.
24. Preparation of caries cavities: rules, principles, methods, stages. Choice of instruments according to the preparation stage.
25. The preparation of I class caries cavities in the deciduous and permanent teeth. Peculiarity preparation of caries cavity.
26. The preparation of II class caries cavities in the children's deciduous and permanent teeth. Peculiarity of preparation and formation of additional platform. Preparation of adjacent caries cavities.
27. Preparation of III class caries cavities in the children's deciduous and permanent teeth.
28. Preparation of IV class caries cavities in the children's deciduous and permanent teeth.
29. Preparation of V class caries cavities in the children's deciduous and permanent

teeth.

30. Formation of caries cavities under different groups of filling materials (zinc - phosphate cement, glass ionomer cement, amalgam, composite material).
31. Classification of the filling materials.
32. Temporary filling materials: composition, properties. Indications for using. The techniques for preparation and filling.
33. Classification of stomatological cements.
34. Zinc – phosphate cements: composition, properties. Indications for using in the deciduous and permanent teeth. The techniques for preparation and filling.
35. Silicate-phosphate cements: composition, properties. Indications for using in the deciduous and permanent teeth. The techniques for preparation and filling.
36. Silicate cements: composition, properties. Indications for using in the deciduous and permanent teeth. The techniques for preparation and filling.
37. Glass ionomer cements: composition, properties. Indications for using in the deciduous and permanent teeth. The techniques for preparation and filling.
38. Metal - including materials. Amalgam: composition, properties. Indications for using in the deciduous and permanent teeth. The techniques for preparation and filling.
39. Composite materials: classification, composition, properties. Indications for using. A technique of preparing.
40. Compomers: composition, properties. Indications for using in the deciduous and permanent teeth. The techniques for preparation and filling.
41. Materials for isolating linings, the requirements for them. The method of application and preparation for isolating lining.
42. Materials for treatment linings: composition, properties. The techniques of preparation and application.
43. Hermetical sealants: classification, composition, properties. Indications for using.
44. Kinds and techniques of acid etch of the dental hard tissues. The main purpose of acid etch.
45. Adhesive systems: kinds, prescribe, a technique of application.
46. Filling caries cavities of I class. The appliance (device) using for isolation of tooth from saliva.
47. Filling caries cavities of II class. Necessary stomatological accessories.
48. Contact point: purpose, evidence to restoration. Necessary stomatological accessories for restoration of contact point.
49. Filling caries cavities of III class. Filling of adjacent caries cavities. Necessary stomatological accessories.
50. Filling caries cavities of IV class. Necessary stomatological accessories.
51. Filling caries cavities of V class. Necessary stomatological accessories.
52. Finish polishing of the filling, stages. Necessary instruments and accessories for these manipulations.
53. Technique of caries cavities filling with amalgam. Choice of the instruments.
54. Technique of caries cavities filling with composite materials chemical cure.
55. Technique of caries cavities filling with composite materials light cure.

56. Impregnation treatment of hard tissues in primary teeth. Indication, method of application.
57. Technique of teeth fissure filling with hermetical sealants.
58. Endodontics: definition, the purpose, tasks.
59. Topography of a tooth cavity in the maxilla deciduous teeth.
60. Topography of a tooth cavity in the mandible deciduous teeth.
61. Topography of a tooth cavity in the maxilla permanent teeth.
62. Topography of a tooth cavity in the mandible permanent teeth.
63. Describe the stages of apex formation connected with root development.
64. Describe the technique of tooth cavity disclosing.
65. Technique of dental cavity disclosing in the deciduous and permanent incisors of maxilla and mandible.
66. Technique of dental cavity disclosing in the deciduous and permanent and canines of maxilla and mandible.
67. Technique of dental cavity disclosing in the permanent premolars of maxilla and mandible.
68. Technique of dental cavity disclosing in the deciduous and permanent molars of maxilla and mandible.
69. What kinds of complications are possible, when you disclose dental cavity?
70. Methods and rules for of the root canal length measuring.
71. Endodontics instruments: classification, purpose, technique of application.
72. Stages of endodontics treatment in the deciduous and permanent teeth. Choice of instruments.
73. Features of endodontics treatment in the teeth with immature root formation.
74. Medical cleaning of root canal in the deciduous and permanent teeth in the different stages of root formation. Choice of instruments and remedies (drugs).
75. Classification of filling materials for root canals. The main requirements for them.
76. Plastic unhardening filling materials for root canals. Composition, indications for using, technique of preparation and filling.
77. Plastic hardening filling materials for root canals. Kinds, properties, indications for using, positive and negative properties.
78. Gutta-percha as root canal filling material: kinds, properties, indications for using.
79. The root filling material materials recommended for primary teeth accordant to the period of root development.
80. The root filling material materials recommended for permanent teeth accordant to the period of root development.
81. Technique of root canals filling with sealer.
82. Techniques of sealing root channels with cold gutta-percha point.
83. Impregnation method for root canals treatment: remedies, technique of application.
84. Resorsine-formaline method for root canals treatment. The main recommended remedies. Technique of application.
85. Method of root canals silvering: indications for using, remedies, technique of using.
86. Technique of electrodes fixing for electrophoresis.

4.7 THE LIST OF PRACTICAL TASKS AND WORK FOR CONCLUDING CONTROL MODULE 1

1. Accomplish cleaning, disinfections, sterilization of dental instruments.
2. Found anatomical different sings between primary and permanent teeth.
3. Master the technique of preparation of caries cavity I class in primary and permanent teeth.
4. Master the technique of preparation of caries cavity II class in primary and permanent teeth.
5. Master the technique of preparation of caries cavity III class in primary and permanent teeth.
6. Master the technique of preparation of caries cavity IV class in primary and permanent teeth
7. Master the technique of preparation of caries cavity V class in primary and permanent teeth.
8. To be able to prepare the zinc – phosphate cements for filling.
9. To be able to prepare the glass ionomer cements for filling.
10. To be able to prepare the chemical - cure composite materials for filling.
11. To be able to prepare the amalgam for filling.
12. To be able to prepare the silicate-phosphate and silicate cement.
13. To be able to prepare techniques of acid etch of the dental hard tissues, cover it with adhesive system.
14. Master the technique of fill in with isolative and treatment liner.
15. To be able to filling caries cavities of I class with different dental material in primary and permanent teeth.
16. To be able to filling caries cavities of II class with different dental material in primary and permanent teeth.
17. To be able to filling caries cavities of III class with different dental material in primary and permanent teeth.
18. To be able to filling caries cavities of IV class with different dental material in primary and permanent teeth.
19. To be able to filling caries cavities of V class with different dental material in primary and permanent teeth.
20. Master the technique of dental cavity disclosing in the deciduous and permanent incisors and canines of maxilla and mandible.
21. Master the technique of dental cavity disclosing in the deciduous and permanent premolars maxilla and mandible.
22. Master the technique of dental cavity disclosing in the deciduous and permanent molars maxilla and mandible.
23. To be able to choice the instrument for mechanical treatment of root canal in the deciduous and permanent teeth, take in accounts the root development.
24. To be able to make the mechanical treatment of root canal in the deciduous and permanent teeth, take in accounts the stage of the root formation.

25. To be able to make the medicament treatment of root canal in the deciduous and permanent teeth, take in accounts the stage of the root formation.
26. Master the impregnation method of root canals treatment in the deciduous and permanent teeth accounts the stage of the root formation.
27. Prepare the resorcinol - formaline past.
28. Prepare the zinc – eugenol past for the root canals filling.
29. To be able to prepare the calcium hydroxide past for the root canals filling in primary teeth.
30. Master the technique of root filling with past in primary teeth.
31. Master the technique of temporary and permanent root canals filling with pasts take in accounts the stage of the root formation in permanent teeth.
32. Master the technique of root canals filling with gutta-percha in the permanent teeth; take in accounts the stage of the root complication.

4.8 Recommended literature:

Base literature:

1. Каськова Л.Ф., Бережна О.Е., Ващенко І.Ю. Пропедевтика дитячої терапевтичної стоматології (англійською мовою). – Полтава, 2013. - 140с.;
2. Каськова Л.Ф., Янко Н.В., Карпенко О.О., Амосова Л.І. Медсестринська практика в дитячій стоматології (англійською мовою). - Полтава, 2013. – 92с.
3. Peter Heasman. Restorative Dentistry, Pediatric Dentistry and Orthodontics. - Churchill Livingstone, 2003. – P. 378.
4. Ford T.P., Rhodes J.S., Ford H.E. Endodontics Problem-Solving in Clinical Practice. – Martin Dunitz Ltd, 2002. – 206 p.

Additional literature:

1. Advanced Endodontics by Nageswar Rao R. -2009. – 374p.
2. Harty's Endodontics in Clinical Practice 6th Edition by Bun San Chong. – Churchill Livingstone, 2010. – 312p.
3. Handbook of Clinical Techniques in Pediatric Dentistry by Jane A. Soxman. - Wiley-Blackwell, 2015. – 208p.
4. Paediatric Dentistry at a Glance / Monty Duggal, Angus Cameron, Jack Toumba. - Wiley-Blackwell, 2012. – 120p.
5. Pediatric Dentistry: A Clinical Approach, 3rd Edition / Goran Koch, Sven Poulsen, Ivar Espelid, Dorte Haubek. - Wiley-Blackwell, 2016. – 408p.