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Federal State Budget Educational Institution
of Higher Education
Pacific State Medical University
of the Ministry of Health of the Russian Federation

APPROVED BY

Director of the Institute of Dentistry
_____/ Pervov Yu.Yu./
"8th" of June 2026

COLLECTION OF ASSESSMENT TOOLS

B1.C.30 Pediatric dentistry of the basic educational program of Higher Education

Specialty	31.05.03 Dentistry for foreign students (English-language program) (code, name)
Degree	Specialist's degree
Profile	02 "Healthcare" (in the field of providing health care in patients with dental pathology)
Mode of study	Full-time
Period of mastering the BEP	5 years (nominal length of study)
Institute	of Dentistry

Vladivostok, 2026

1. INTRODUCTION

1.1. Collection of Assessment Tools is a document that regulates the format, content, and types of assessment tools for continuous assessment, interim examination and final (state final) examination, and graded criteria for each type of assessment tools.

1.2. Assessment tools allows to evaluate the development of universal, general professional, and professional competencies (UCs, GPCs and PCs respectively) outlined in Federal State Educational Standard of Higher Education and defined in the basic educational program of higher education for the specialty 31.05.03 Dentistry for foreign students (English-language program), profile 02 "Healthcare" (in the field of providing health care in patients with dental pathology).

([BEP HE for the 31.05.03 Dentistry for foreign students \(English-language program\)](#) specialty, section 3 Learning Outcomes Requirements of the Basic Educational Program of Higher Education)

2. DOCUMENT BODY

2.1. Types of Assessment, Formats of Assessment Tools

No.	Types of assessment	Assessment Tools Format
1	Continuous assessment	Tests
		Interview Questions
		Mini-Case Studies
		Checklists
2	Interim assessment	Interview Questions
		Checklists

3. The contents of assessment tools for continuous and interim examination are prepared by the teacher of the course

1. Interview questions

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for foreign students (English-language program)
C	GPC-5	Able to examine a patient and make a diagnosis
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills
F	A/01.7	Patient examination. Making a diagnosis
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies

F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health
F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		ANSWER THE QUESTIONS Development of teeth 1. List the stages of development of a primary tooth in clinical and radiographic terms. The number of dental follicles at different stages of mineralization in a newborn. 2. List the stages of permanent tooth development in clinical and radiographic terms. Signs of proper tooth eruption 3. Types of physiological resorption of the roots of primary teeth according to T.F. Vinogradova. 4. Anatomical and physiological characteristics of the child's body. 5. Timing of primary teeth eruption. The period of primary dentition formation. Signs of physiological closure of the dental arches, characteristic of primary dentition. 6. Timing of permanent teeth eruption. Signs of physiological closure of the dental arches, characteristic of the permanent dentition. 7. Critical periods in a child's growth and development 8. Histogenesis of dental tissues. Development of dentin and enamel. 9. Histogenesis of dental tissues. Development of cementum and tooth root. 10. Types of radiographs most commonly encountered in dentistry. Cariesology 11. Pathological anatomy of caries in the spot stage according to S.P. Onishchenko and V.P. Zelenovsky. 12. De- and remineralization processes of tooth enamel. Their importance in the development of caries. Diagnosis of focal demineralization. 13. The role of fluorides in increasing caries resistance of hard dental tissues 14. Degrees of activity of the carious process according to T.F. Vinogradova. 15. Antenatal caries prevention in primary and permanent teeth. Risk factors for caries development in primary teeth. Provide examples. 16. Clinical classification of caries in primary teeth. 17. Initial caries (caries in the spot stage). Etiology, clinical picture, treatment stages. 18. Features of the course of caries in childhood. 19. Features and methods of treatment of "bottle caries" caries of baby teeth 20. Dentin caries in primary teeth. Etiology, clinical features, treatment stages, and choice of filling material. 21. Features of treatment of superficial caries using the infiltration and minimal invasion method. 22. Stages of treatment of multiple caries in the primary dentition 23. Treatment of caries in primary teeth. Features of filling materials used in the treatment of primary teeth. 24. Clinical classification of caries in permanent teeth in children. Diagnosis, stages of treatment of initial caries and fissure caries. 25. Features of filling materials used in the treatment of caries in permanent teeth during the period of mixed dentition.

26. Methods of odontopreparation (chemical-mechanical, mechanical)
27. Possible complications in the treatment of caries of permanent teeth in children.
28. The concept of the prevalence and intensity of the carious process, the increase in intensity. Indices characterizing them.
29. Dentin caries in permanent teeth. Etiology, clinical picture, treatment stages, choice of filling material.
30. Stages of professional hygiene in adolescents.

Pulpitis.

31. Features of the clinical picture of pulpitis in children.
32. Etiology of the inflammatory process in the dental pulp. The most common forms of pulpitis.
33. Methods of treating pulpitis in children.
34. Clinical classification of pulpitis in children.
35. List the factors that determine the choice of treatment method for pulpitis of primary teeth depending on the stage of root development.
36. Types of injection anesthesia used in childhood: intraligamentary, intraosseous, infiltration.
37. General anesthesia: indications, features, advantages. Anesthesia medications.
38. Types of pain relief in pediatric practice. Local anesthetic drugs.
39. Stages of pulpitis treatment using vital amputation in primary teeth with an unformed root.
40. Stages of pulpitis treatment using vital amputation in permanent dentition with unformed roots.
41. Differential diagnosis of chronic fibrous and gangrenous pulpitis clinically and morphologically.
42. Justification for choosing a biological method for treating pulpitis in children in the primary and permanent dentition.
43. Vital amputation method for treating pulpitis in primary teeth. Rationale, filling materials, and therapeutic pastes.
44. Indications and contraindications for the treatment of pulpitis of primary teeth using vital amputation.
45. Vital amputation method for treating pulpitis in permanent teeth with unformed root apices. Rationale, filling materials, and therapeutic pastes.
46. Stages of the method of devital amputation in the primary dentition in preschool children
47. Stages of the method of devital amputation in the primary dentition in schoolchildren
48. Methods of devital extirpation in primary and permanent teeth. Indications, treatment stages, filling materials.
49. Indications for choosing a deep amputation method in primary and permanent teeth. Stages, filling materials.
50. Vital extirpation method for treating pulpitis in children. Treatment stages, filling materials.
51. The concepts of apexogenesis and apexification. Their importance in clinical observation.
52. Draw up a treatment plan for a patient with acute pulpitis of a primary molar (5 years old).
53. Draw up a treatment plan for a patient with an exacerbation of chronic pulpitis of a primary molar (a 7-year-old patient).

Periodontitis.

54. Features of the development of periodontitis in children
55. Causes of periodontitis in primary teeth. Which form is most common?
56. Indications for removal of primary teeth in case of pulpitis and periodontitis.
57. Methods of treatment of periodontitis of primary teeth.
58. Algorithm of endodontic manipulations in the treatment of periodontitis in children.
59. Features and methods of treatment of periodontitis of permanent teeth with unformed tooth roots.
60. Stages of treatment of granulating periodontitis in children in a single-rooted tooth with a formed root.

Dental injuries.

61. Methods of examination of children with acute trauma.
62. Principles of treatment of trauma to teeth with unformed root apex of permanent teeth.
63. Clinical signs of a permanent tooth contusion in the first 2-3 days after injury.
64. Clinical signs of incomplete dislocation of a temporary tooth in the first days after injury
65. Radiographic and clinical signs of impacted dislocation of a permanent formed tooth.
66. Radiographic and clinical signs of a fracture of the crown of a permanent immature tooth.
67. Damage to dental crowns in the enamel and dentin area without opening the tooth cavity. Principles of selecting materials for restoring the crowns of permanent immature teeth.
68. Radiographic signs of different groups of formed teeth.
69. Damage to dental crowns in the enamel and dentin area with exposure of the tooth cavity. Principles of treatment methods for permanent immature teeth.
70. Medical examination of children with acute dental trauma
71. Tooth root fractures in the cervical, middle, and apical thirds. Treatment principles.
72. Emergency dental care for acute dental trauma.

Non-carious lesions of hard tissues.

73. Classification of non-carious lesions according to M.I. Groshikov.
74. For what non-carious lesions of hard dental tissues is it advisable to conduct an X-ray examination?
75. Clinical classification of dental enamel hypoplasia. Causes of local and systemic hypoplasia.
76. Systemic enamel hypoplasia in children. Clinical forms of systemic hypoplasia.
77. Hereditary disorders of dental hard tissue development. Amelogenesis imperfecta
78. Clinical forms of fluorosis.
79. Endemic fluorosis. Forms of fluorosis.
80. Classification of hereditary odontoclasia.
81. Etiology and pathogenesis of local hypoplasia of permanent premolars.

Periodontal diseases.

		82. Local factors and systemic diseases leading to the development of periodontal diseases in children. 83. Classification of periodontal diseases. Mechanism of development of inflammatory periodontal diseases. 84. General factors and systemic diseases leading to the development of periodontal diseases in children. 85. The concept of "juvenile gingivitis". Treatment methods. 86. Characteristics of true and false periodontal pockets. 87. Idiopathic diseases leading to the development of periodontal diseases in children. 88. Characteristics of true and false periodontal pockets. 89. Hygiene products and items necessary for patients with periodontal diseases. 90. Methods of examination of children with periodontal diseases. 91. Periodontal diseases in children. Chronic catarrhal and hypertrophic gingivitis in children. 92. Periodontal diseases in children. Ulcerative necrotic gingivitis in children. 93. Principles of treatment of children with periodontal diseases.
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Assessment criteria

“Very good” - more than 91% correct answers

“Good” - 81-90% correct answers

“Satisfactory” - 71-80% correct answers

“Unsatisfactory” - less than 71% correct answers

2. Tests for continuous and interim assessment

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for foreign students (English-language program)
C	GPC-5	Able to examine a patient and make a diagnosis
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills
F	A/01.7	Patient examination. Making a diagnosis
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health
F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)
		1. Deciduous teeth form at 1) 2-6 weeks of pregnancy

	2) 7-20 weeks of pregnancy 3) 20-30 weeks of pregnancy 4) 30-33 weeks of pregnancy 5) the first month after birth
	2. Mineralization of the first permanent molars and incisors begins 1) in the first half of pregnancy 2) in the 2nd half of pregnancy 3) in the 1st week after birth 4) in the 2nd half of the first year of life 5) at the age of 2-3 years 3. Roots of primary molars are resorbed when children reach 1) 5-8 years of age 2) 9-12 years of age 3) 13 years of age 4) 7-11 years of age 4. When undergoing remineralizing therapy, the child should brush their teeth 1) in the morning after breakfast 2) immediately before the procedure 3) before breakfast 5. Toothpastes with caries-preventive properties include 1) hygienic toothpastes 2) anti-inflammatory toothpastes 3) fluoride-containing toothpastes 6. Remineralizing therapy is carried out for 1) dentin caries 2) caries in the spot stage 3) complicated caries 7. Preparation of deciduous teeth is indicated for 1) rapidly progressing caries in the spot stage 2) dentin caries 3) slowly progressing caries in the spot stage 8. The period of physiological rest of a deciduous tooth lasts from 1) its eruption until it is replaced by a permanent one 2) the end of root formation until the beginning of its resorption 3) the moment of tooth eruption until the appearance of a carious cavity 9. Thickness of enamel after tooth eruption _____ as the child ages 1) increases as a result of the functioning of ameloblasts 2) does not change, since ameloblasts are absent after the formation of the crown 3) decreases as a result of physiological wear and tear 4) increases as a result of remineralizing therapy 5) increases as a result of the functioning of odontoblasts 10. The growth zone of the root is defined on the radiograph as a site of bone rarefaction 1) with clear contours at the root apex with a narrow canal

		2) limited on the periphery by a compact plate at the apex of the root with a wide canal 3) with fuzzy, flame- shaped contours at the apex of the root with a wide canal 4) with fuzzy, flame- shaped contours at the root apex with a narrow canal 5) not detectable on radiograph 11. Radiographically, in chronic forms of pulpitis in the interroot space of temporary molars _____ is(are) revealed 1) expansion of the periodontal ligament space 2) weakening of the bone trabeculae pattern 3) osteosclerosis 4) hypercementosis 5) no changes 12. The form of pulpitis that is predominant in primary teeth in children is 1) acute focal pulpitis 2) acute diffuse pulpitis 3) chronic fibrous pulpitis 4) chronic gangrenous pulpitis 5) chronic hypertrophic pulpitis 13. The form of pulpitis that is predominant in permanent teeth in children is 1) acute focal pulpitis 2) acute diffuse pulpitis 3) chronic fibrous pulpitis 4) chronic gangrenous pulpitis 5) chronic hypertrophic pulpitis 6) chronic pulpitis in the acute stage 14. Painful probing deep into the tooth cavity is characteristic of 1) acute focal pulpitis 2) acute diffuse pulpitis 3) chronic fibrous pulpitis 4) chronic gangrenous pulpitis 5) chronic hypertrophic pulpitis 15. Chronic hypertrophic pulpitis is characterized by complaints of 1) spontaneous pain 2) constant pain 3) pain caused by food debris in the carious cavity 4) radiating pain 5) pain caused by temperature irritants 16. The choice of treatment method for pulpitis in children depends on 1) diagnosis of the disease, group affiliation of teeth, stage of their development 2) the age of the child, the presence of concomitant somatic pathology 3) stages of development of teeth and their group affiliation 4) diagnosis 5) group that the teeth belong to 17. In amelogenesis imperfecta there are structural abnormalities of 1) dentin only
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		2) enamel only 3) enamel and dentin 4) pulp 5) periodontium 18. Plaster teeth are a form of 1) enamel hypoplasia 2) fluorosis 3) amelogenesis imperfecta 4) dentinogenesis imperfecta 5) imperfect odontogenesis 19. Imperfect odontogenesis (Capdepon's dysplasia) affects 1) all deciduous teeth 2) deciduous and permanent molars 3) deciduous and permanent incisors 4) all deciduous and permanent teeth 5) only permanent teeth 20. Confirmation of the diagnosis of periodontitis is based on 1) clinical presentation 2) radiography data 3) rheoparodontography data 4) densitometry data 5) rheoplethysmography data 21. In chronic fibrous periodontitis, the inflammatory process is localized 1) in the periodontium 2) in the bone and alveoli 3) subperiosteally 4) in the jaw bone tissue 5) in adjacent soft tissues 22. In acute apical periodontitis of a permanent formed tooth, ____ is revealed on a radiograph 1) widening of the periodontal space 2) absence of pathological changes 3) sclerotic changes in the bone tissue surrounding the tooth root 4) rarefaction of bone tissue at the root apex 5) rarefaction of bone tissue between the roots 23. The quality of root canal filling is assessed based on the 1) EOD data 2) radiography data 3) densitometry data 4) rheoparodontography data 5) rheoplethysmography data
		ANSWER LEVEL 2 TEST QUESTIONS (MULTIPLE CORRECT ANSWERS)
		1. Complaints in patients with contusion of deciduous and permanent teeth in the first 2-3 days after the injury include 1) constant aching pain 2) no complaints 3) intense paroxysmal pain at night

	4) the feeling that the tooth has "grown" 5) pain from temperature stimuli 6) refusal to eat solid food 2. Treatment of impacted tooth luxation of temporary unformed incisors requires 1) tooth extraction using orthodontic appliances 2) reposition 3) tooth extraction 4) soft diet, anti-inflammatory treatment 5) dynamic observation, tooth extraction if inflammation increases 6) applying a splint to the tooth for 3-4 weeks 3. Clinical signs of contusion of a deciduous or permanent tooth in the first 2-3 days include 1) the tooth is shorter than the symmetrical one, immersed in the socket 2) painful percussion 3) displacement of the crown in different directions 4) the tooth is longer than symmetrical, painful percussion 5) tooth mobility is slight or absent 6) no pathology is detected 4. Odontogenic infection may cause acute lymphadenitis of the maxillofacial area predominantly in children aged 1) 1-2 years 2) 2-3 years 3) 3-4 years 4) 6 years 5) 7 years 6) 8 years 5. Medications most often prescribed in case of acute herpetic stomatitis are 1) Nizoral, Riodoxal, Diazolin, Decaris 2) Diazolin, Tavegil, Diprazin, Fenkarol 3) Zovirax, Gossypol, Miconaz, Suprastin 4) Bonaftone, Tebrofen 5) Retinol, Solcoseryl, Methyluracil 6) Florenal, Acyclovir 6. Vitaftor is prescribed to children in case of 1) 2nd degree of caries activity 2) 1st degree of caries activity 3) hypoplasia 4) fluorosis 5) 3rd degree of caries activity 6) aplasia 7. The defining factor in differential diagnostics of acute partial pulpitis is 1) time 2) nature of pain 3) thermometry 4) electrometry 5) percussion 6) primary nature of pain
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8. The defining factor in differential diagnostics of acute purulent general pulpitis is

- 1) sharp, “tearing” pain
- 2) pain from cold
- 3) pain from sweets
- 4) pain from mechanical irritants
- 5) pain when biting
- 6) throbbing pain

9. Extirpation treatment methods of pulpitis of deciduous molars are indicated in children aged

- 1) 3 years
- 2) 1-3 years
- 3) 6 years
- 4) 5 years
- 5) 8 years
- 6) 7 years

10. Endontic tools do NOT include

- 1) burnisher
- 2) plugger
- 3) spreader
- 4) countersink drill
- 5) protaper
- 6) probe

11. The defining factor in differential diagnostics of acute purulent general pulpitis is

- 1) sharp pain
- 2) pain from cold
- 3) pain from sweets
- 4) pain from mechanical irritants
- 5) pain when biting
- 6) “tearing”, throbbing pain

12. Caries may be caused by

- 1) low fluoride levels in drinking water
- 2) high fluoride levels in drinking water, delayed teething
- 3) unbalanced nutrition at an early age, family history of dental pathology
- 4) poor oral hygiene, oral microorganisms
- 5) carbohydrate-rich foods, dental plaque microorganisms
- 6) toxocosis of the second half of pregnancy, impaired intrauterine mineralization

13. Treatment of decompensated form of superficial caries includes

- 1) surface stripping, coating with fluoride varnish
- 2) oral hygiene training
- 3) oral hygiene training, remineralization
- 4) remineralization, filling
- 5) remineralization, surface stripping
- 6) filling, follow-up observation

14. The most cause of local enamel hypoplasia in children is

		1) mechanical trauma to the developing follicle of a permanent tooth 2) chronic periodontitis of a deciduous tooth 3) inflammatory process of the cortical lamina due to chronic periodontitis of a deciduous tooth 4) subacute phase of odontogenic osteomyelitis of the jaw bones 5) illness of the mother during pregnancy and the influence of adverse environmental factors 6) intrauterine pneumococcal infection of the fetus 15. The severity of clinical manifestations of endemic fluorosis in children depends on 1) fluoride concentration in drinking water 2) family history of dental pathology 3) previous diseases during early age 4) early weaning 5) unbalanced nutrition of the child at an early age 6) amount of water drunk 16. Symptoms of moderately severe candidiasis include 1) easily removable curdy white coating accumulating on certain areas of the mucosa 2) thick dirty gray coating covering significant area that cannot be completely removed 3) film-like coating that can be partially removed 4) affected skin of the folds, corners of the mouth, and visible mucous membranes over a long period of time 5) single erosions on of the mucosa, covered with plaque, painful to the touch 6) mucosa under the plaque is eroded and inflamed, prone to bleeding 17. Deciduous lower incisors erupt at 1) 7 months 2) 3 months 3) 5 months 4) 6.5 months 5) 8 months 6) 2 months 18. Deciduous upper incisors erupt at 1) 6 months 2) 10 months 3) 11 months 4) 10.5 months 5) 4 months 6) 8 months 19. Dietary recommendations often used to prevent caries include 1) avoiding using sweet drinks in a bottle or sippy cup 2) avoiding acidic foods 3) long-term breastfeeding is not recommended 4) limit consumption of carbonated and fruit drinks 5) choosing safe snacks such as fruits and cheese 6) avoiding brushing teeth for at least 30 minutes after using erosive agents
		ANSWER LEVEL 3 TEST QUESTIONS (MATCHING QUESTIONS)

1. Match the eruption period to the deciduous tooth

Deciduous tooth:	Eruption period:
1) I tooth	A) 7-9 months.
2) II tooth	B) 12-16 months.
3) III tooth	C) 6-8 months.
4) IV tooth	D) 20-30 months.
5) V tooth	E) 16-20 months.

2. Match the period of formation and resorption of the deciduous teeth roots to their timeframes

Formation and resorption of tooth roots:	Timeframe:
1) completion of the formation of the root of the I tooth	A) by 5 years
2) the beginning of resorption of the root of the II tooth	B) by 2 years
3) completion of the formation of the root of the III tooth	C) from 5 years old
4) the beginning of resorption of the roots of the IV tooth	D) by 4 years
5) completion of the formation of the roots of the V tooth	E) from 7 years old

3. Match eruption period to the permanent teeth

Permanent tooth:	Eruption period:
1) 11, 21 teeth	A) 8-9 years
2) 12, 22 teeth	B) 7-8 years
3) 13, 23 teeth	C) 11-12 years old
4) 14, 24 teeth	D) 10-13 years
5) 15, 25 teeth	E) 9-10 years

4. Match eruption period to the permanent teeth

Permanent tooth:	Eruption period:
1) 18, 28 teeth	A) 6-7 years
2) 17, 27 tooth	B) 10-13 years
3) 13, 23 tooth	C) 12-13 years old
4) 16, 26 teeth	D) 11-12 years old
5) 15, 25 teeth	E) after 17 years

5. Match root formation period to the permanent teeth

Permanent tooth:	Root formation timeframe:
1) 11, 21 teeth	A) by the age of 13
2) 12, 22 teeth	B) by the age of 10
3) 13, 23 tooth	C) by the age of 12
4) 14, 24 teeth	D) by the age of 12
5) 15, 25 teeth	E) by the age of 10

6. Match the mineralization timeframes with permanent teeth

Permanent tooth:	Enamel mineralization onset:
1) 11, 21 teeth	A) from 8 years old
2) 16, 26 teeth	B) from 3-5 months after birth
3) 12, 22 teeth	C) in the 1st year after birth
4) 14, 24 teeth	D) from 1.5 to 3 years of age
5) 18, 28 tooth	E) the first month after birth

7. Match the mineralization timeframes with deciduous teeth

Deciduous tooth:	Completion of enamel mineralization:
1) 51, 61 teeth	A) 4-5 years
2) 52, 62 teeth	B) 5-6 years
3) 53, 63 tooth	C) 4-5 years
4) 54, 64 teeth	D) 6-7 years
5) 55, 65 teeth	E) 6-7 years

8. Match models of follow-up observation and the child's dental status

Child's dental status:	Follow-up observation model:
1) the oral cavity is sanitized, there are risk factors for the development of caries	A) examination 4 times a year
2) oral cavity without pathological changes	B) a medical examination once a year

	3) several carious cavities in the teeth	C) medical examination 3 times a year	
	4) dental malformations combined with caries	D) examinations according to indications, taking into account the type of caries activity	
	5) III degree of caries activity	E) medical examination twice a year	

Assessment criteria

“Very good” - more than 91% correct answers of questions of every level

“Good” - 81-90% correct answers of questions of every level

“Satisfactory” - 71-80% correct answers of questions of every level

“Unsatisfactory” - less than 71% correct answers of questions of every level

Standardized case studies and checklists for the **B1.C.30 Pediatric dentistry** course
Case Study No.1

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for foreign students (English-language program)
C	GPC-5	Able to examine a patient and make a diagnosis
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills
F	A/01.7	Patient examination. Making a diagnosis
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health
F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS A 10-year-old child suffered a dental injury and presented to a dentist on the day of the injury. Examination revealed the crown of tooth 21 to be missing, the cavity of the tooth was widely separated from the oral cavity, and probing the pulp was extremely painful

		
Q	1	Question: Make an examination plan
Q	2	Question: Conduct differential diagnostics and make a diagnosis
Q	3	Question: Select a treatment method
Q	4	Question: Determine the duration of follow-up observation
Q	5	Question: List possible complications

Case Study No.1 Checklist

	Code	Competence description / name of labor function / name of work activity / text	
S	31.05.03	Dentistry for foreign students (English-language program)	
C	GPC-5	Able to examine a patient and make a diagnosis	
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies	
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods	
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment	
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology	PC-3
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills	
F	A/01.7	Patient examination. Making a diagnosis	
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies	
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health	
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Q	1	Question: Make an examination plan	
A		Correct answer: During the examination the following is determined: 1. Absence of a tooth crown, 2. Pain and bleeding in the area of the damaged tooth. 3. It is necessary to conduct an X-ray examination to rule out a root fracture.	
R2	Very good	All descriptors of the correct answer have been listed	
R1	Good	2 descriptors of the correct answer have been listed	
	Satisfactory	1 descriptor of the correct answer has been listed	
R0	Fail	No descriptors of the correct answer have been listed	
Q	2	Question: Conduct differential diagnostics and make a diagnosis	
A		Correct answer: Differentiate with: 1. A fracture of the tooth crown without damage to the pulp (complaints of pain when touching the tooth and short-term pain from chemical, thermal, and mechanical irritants. Percussion of the tooth may be painful. Objectively, a defect in part of the crown within the dentin and pain upon probing the dentin surface in the fracture area are noted). 2. A fractured tooth crown with pulp damage (patients complain of pain from mechanical and thermal stimuli, as well as pain when touching the tooth. Upon examination, the pulp is visible, exposed in one spot or over a larger area, and is acutely painful to the touch. Percussion of the tooth may be painful for several days after the injury). 3. Fracture of the tooth root (in the first hours after the injury, the victim may complain of pain when biting on the tooth and its mobility. During examination, painful percussion of the tooth is determined, bleeding from the gingival sulcus is possible, and a change in the color of the crown is associated with intrapulpal hemorrhage). Diagnosis: 4. Complete fracture of the tooth crown.	
R2	Very good	All descriptors of the correct answer have been listed	
R1	Good	3 descriptors of the correct answer have been listed	
	Satisfactory	1-2 descriptors of the correct answer have been listed	
R0	Fail	No descriptors of the correct answer have been listed	
Q	3	Question: Select a treatment method	
A		Correct answer: 1. Anesthesia is administered and the method of vital pulp extirpation is used, the canal is filled. 2. In order to improve the conditions for fixing the filling, a pin can be made, which is cemented into the canal. 3. The missing portion of the crown is restored with a composite filling material and a cap. Alternatively, an inlay or artificial crown can be fabricated.	

		4. Restoration of the broken part of the tooth should be carried out in the next few days after the injury, since in the absence of contact with the antagonist, the tooth will quickly move and the adjacent teeth will tilt towards the defect, which will not allow for further prosthetics without prior orthodontic treatment.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3 descriptors of the correct answer have been listed
	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	4	Question: Determine the duration of follow-up observation
A		Correct answer: 1. Additional examination methods are carried out: radiography, thermo- and electroodontodiagnostics, transillumination. 2. Pulp vitality tests should be repeated at 1 week, 1, 3, 6 and 12 months after injury and 3. Then once a year until the root is fully formed.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	2 descriptors of the correct answer have been listed
	Satisfactory	1 descriptor of the correct answer has been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	5	Question: List possible complications
A		Correct answer: 1. Tooth root fracture (longitudinal) 2. Tooth root fracture (transverse) 3. Tooth root fracture (oblique) 4. Tooth root fracture (with or without displacement)
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3 descriptors of the correct answer have been listed
	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed

Case Study No.2

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for foreign students (English-language program)
C	GPC-5	Able to examine a patient and make a diagnosis
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills
F	A/01.7	Patient examination. Making a diagnosis

F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health
F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS The parents of a 1-year-9-month-old child presented to the clinic complaining of decay in their child's primary teeth. The child had been bottle-fed since the age of 2 months. They currently use a bottle with a sweet formula for nighttime feedings. Changes in enamel structure have been observed since the child was 1 year 2 months old. 
Q	1	Question: Make a preliminary diagnosis and justify it
Q	2	Question: What causes could have led to the development of this pathology?
Q	3	Question: Make a treatment plan.
Q	4	Question: List the filling materials recommended for treatment
Q	5	Question: Suggest a prevention plan

Case Study No.2 Checklist

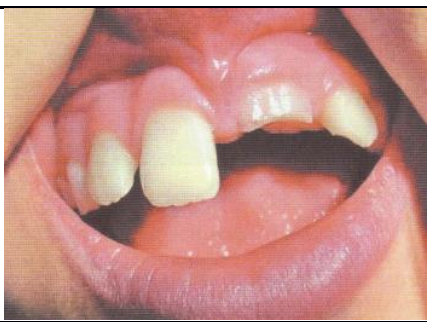
	Code	Competence description / name of labor function / name of work activity / text	
S	31.05.03	Dentistry for foreign students (English-language program)	
C	GPC-5	Able to examine a patient and make a diagnosis	
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies	
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods	
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment	
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology	PC-3
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills	
F	A/01.7	Patient examination. Making a diagnosis	
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies	
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health	

F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS The parents of a 1-year-9-month-old child presented to the clinic complaining of decay in their child's primary teeth. The child had been bottle-fed since the age of 2 months. They currently use a bottle with a sweet formula for nighttime feedings. Changes in enamel structure have been observed since the child was 1 year 2 months old. 
Q	1	Question: Make a preliminary diagnosis and justify it
A		Correct answer: 1. Caries media 8.3 7.3 - K02.1 Dentin caries; 2. Superficial caries 8.2, 8.1, 7.1, 7.2 - K02.0 Enamel caries. Based on: 3. Complaints (about the destruction of deciduous teeth) 4. Anamnesis (the child was bottle-fed from 2 months. To this day, a bottle with sweet formula is used for night feeding. 5. Objective data
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3-4 descriptors of the correct answer have been listed
	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	2	Question: What causes could have led to the development of this pathology?
A		Correct answer: 1. Lack of breastfeeding, 2. Violation of the feeding regimen, 3. Lack of oral hygiene.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	2 descriptors of the correct answer have been listed
	Satisfactory	1 descriptor of the correct answer has been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	3	Question: Make a treatment plan.
A		Correct answer: 1. Professional hygiene, hygiene lesson. 2. Remineralizing therapy using Belagel Ca /P, GC Tooth Mousse, ROCS medical . 3. Filling 8.3, 7.3.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	2 descriptors of the correct answer have been listed
	Satisfactory	1 descriptor of the correct answer has been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	4	Question: List the filling materials recommended for treatment
A		Correct answer:

		1. Phosphate cements. 2. Glass ionomer cement (GIC). 3. Remineralizing preparations (Belagel Ca /P, GC Tooth Mousse , ROCS medical).
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	2 descriptors of the correct answer have been listed
	Satisfactory	1 descriptor of the correct answer has been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	5	Question: Suggest a prevention plan
A		Correct answer: 1. Avoid feeding and drinking sweet drinks from a bottle at night. 2. Training in oral hygiene methods. 3. Preventive examination every six months by a pediatric dentist
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3 descriptors of the correct answer have been listed
	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed

Case Study No.3

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for foreign students (English-language program)
C	GPC-5	Able to examine a patient and make a diagnosis
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills
F	A/01.7	Patient examination. Making a diagnosis
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health
F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS The parents of an 11-year-old child presented to a pediatric dentistry clinic with complaints of a cosmetic defect on tooth 21. The child's medical history revealed an injury from a bicycle fall a week earlier. The child experienced pain when eating hot, cold, or hard foods. Probing of the fracture line of tooth 21 revealed a connection with the cavity.

		
Q	1	Question: Make a preliminary diagnosis and justify it
Q	2	Question: Conduct differential diagnostics
Q	3	Question: Name the additional examination methods that will help clarify the diagnosis
Q	4	Question: Suggest treatment methods
Q	5	Question: Suggest treatment methods

Case Study No.3 Checklist

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.03	Dentistry for foreign students (English-language program)
C	GPC-5	Able to examine a patient and make a diagnosis
C	GPC-6	Able to administer and control the effectiveness and safety of non-pharmacological and pharmacological therapies
C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods
C	PC-2	ability to administer and apply modern methods and/or digital technologies to treat dental patients as well as monitor the effectiveness and safety of the treatment
C	PC-4	ability and readiness to conduct preventive medical examinations, dispensary exam and dispensary follow-up of patients with dental pathology
C	PC-5	ability to conduct educational activities to eliminate the risk factors for dental health and develop healthy lifestyle skills
F	A/01.7	Patient examination. Making a diagnosis
F	A/02.7	Prescribing and monitoring the effectiveness and safety of non-pharmacological and pharmacological therapies
F	A/04.7	Implementing and monitoring the effectiveness of sanitary, anti-epidemic and other preventive measures to protect public health
F	A/05.7	Educating population and medical care providers about hygiene and healthy life style
I		READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS The parents of an 11-year-old child presented to a pediatric dentistry clinic with complaints of a cosmetic defect on tooth 21. The child's medical history revealed an injury from a bicycle fall a week earlier. The child experienced pain when eating hot, cold, or hard foods. Probing of the fracture line of tooth 21 revealed a connection with the cavity.

		
Q	1	Question: Make a preliminary diagnosis and justify it
A		Correct answer: Pulpitis of the tooth 2.1. Fracture of the crown of the tooth with damage to the pulp (S02.52) Based on: 1. Patient complaints (painful sensations occur during eating when consuming hot, cold, or hard food). 2. Medical history (a week ago there was an injury as a result of falling from a bicycle). 3. Objective data: when probing the fracture line of tooth 2.1, a connection with the cavity of the tooth was detected
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3 descriptors of the correct answer have been listed
	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	2	Question: Conduct differential diagnostics
A		Correct answer: 1) Pulp hyperemia. Short-term pain from mechanical, chemical, and thermal irritants, resolving immediately after their removal. Probing the cavity floor is mildly painful. EOD: 2-12 μA, in acute pulpitis - 15-25 μA. 2) Purulent pulpitis. The pain is acute, paroxysmal, unexplained, diffuse, and lasts for 2 hours or more, with lucid intervals of 10-30 minutes. A worsening of the general condition is possible. Pain radiates along the branches of the trigeminal nerve. Probing the floor of the carious cavity is painful throughout, and the pain persists after probing. Painful vertical percussion of the tooth may also occur. EOD: 25-35 μA. 3) Chronic pulpitis. History of acute or aching pain. Aching pain occurs with changes in ambient temperature and is absent at night. The tooth cavity is usually exposed. EOD: 20-40 μA. Radiographs show slight widening of the periodontal space in the area of the root apex of the affected tooth. 4) Unspecified pulpitis (exacerbation of chronic pulpitis): Acute or aching pain has been repeatedly noted in the past. The nature of the pain depends on the type of exacerbated pulpitis. It may be acute, occurring without cause, or a persistent aching pain. Pain attacks radiate along the branches of the trigeminal nerve. The tooth cavity is exposed, and probing the floor of the carious cavity is extremely painful. Electrodontic transducer (EDT) is 40-80 μA. Radiographs show slight widening or unclear contours of the periodontal space in the area of the root apex of the affected tooth.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3 descriptors of the correct answer have been listed

	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	3	Question: Name the additional examination methods that will help clarify the diagnosis
A		Correct answer: 1. Radiography to determine the condition of the root of the injured tooth and periapical tissues. 2. EOD. 3. Thermometry. 4. Percussion
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	3 descriptors of the correct answer have been listed
	Satisfactory	1-2 descriptors of the correct answer have been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	4	Question: Suggest treatment methods
A		Correct answer: 1. For permanent teeth with formed roots, the vital root pulp extirpation method is used. The root canal is filled to 1/3 of its apical extent. The crown is restored using a composite material secured with an anchor pin. A cast metal post can also be fabricated and a cosmetic crown (plastic, metal-ceramic, etc.) can be attached to it. After vital amputation of the coronal pulp and high amputation of the root pulp, the crown of the permanent tooth is restored after complete root formation using composite materials. 2. Partial pulpectomy (high amputation). This method is indicated for traumatic pulpitis with late presentation, pulpitis of single-root teeth due to complications of caries, and is used in single-root teeth with incomplete root formation. Procedure: Anesthesia, rubber dam. After wide opening of the tooth cavity, the non-viable pulp is removed from the canal under visual and tactile control using a carbide ball-shaped or end-grain bur on an extended stem or a Gates drill. Features of instrumental treatment of tooth canal. • Wide opening of the tooth cavity. • Absence of the stage of expansion of the canal mouth. • Application of standard canal treatment techniques. • Use of large instruments with a safe tip, primarily H-files. • The need for careful removal of softened infected predentin . • No need to form an apical stop. • Careful rinsing of the root canal. After gentle mechanical treatment, hemostasis is achieved and the canal is dried, followed by the application of mineral trioxycarbonate aggregate (MTA) Trioxidant , and filling with odontotropic pastes with anti-inflammatory action (Iodex , Metapex). After radiographic control, an insulating glass ionomer liner and a permanent filling (composite) are applied. After completion of apexogenesis, final filling of the canal and functional cosmetic restoration of the crown are recommended. For 2-3 weeks, dynamic monitoring of the pulp condition is carried out (clinical examination and EOD). If positive dynamics are observed, either restoration is carried out using a non-invasive method veneers, or fixation of standard polycarboxylate temporary crowns, or laboratory-made crowns.

		The child should be monitored regularly. Criteria for normal root formation include the formation of a physiological apex, the absence of inflammatory changes around it, a reduction in the tooth cavity, and the formation of a dentinal bridge.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	2 incomplete descriptors of the correct answer have been listed
	Satisfactory	1 descriptor of the correct answer has been listed
R0	Fail	No descriptors of the correct answer have been listed
Q	5	Question: What is the prognosis for the disease?
A		Correct answer: 1. Favorable with timely treatment, compliance with all recommendations, and dispensary observation. 2. Favorable when the root of the injured tooth and periapical tissues are in good condition.
R2	Very good	All descriptors of the correct answer have been listed
R1	Good	2 incomplete descriptors of the correct answer have been listed
	Satisfactory	1 descriptor of the correct answer has been listed
R0	Fail	No descriptors of the correct answer have been listed

4. Assessment criteria for learning outcomes

"Very good" grade is given to a student who possesses knowledge of the subject in full scope outlined in the curriculum, has a sufficiently deep insight into the subject; is able to answer all questions clearly, exhaustively, and with no outside help; structures their answers logically, with emphasis on the most important information; is able to analyze, compare, classify, summarize, refine, and structure the course content, giving particular attention to cause-and-effect relationships.

"Good" is given to a student whose knowledge of the subject is almost in full scope outlined in the curriculum (gaps are only present in the knowledge of some especially complex aspects); is able to answer questions exhaustively with little to no outside help; does not always put emphasis on the most important information, but does not make significant mistakes.

"Satisfactory" is given to a student who possesses the bulk of knowledge on the subject; has difficulties answering questions with no outside help, uses imprecise wording; makes mistakes in substantial number of their answers.

"Unsatisfactory" is given to a student who does not have the mandatory minimum of knowledge on the subject, is not able to give an answer even with additional guiding questions.

Practical Skills Assessment Checklist

Practical Skill Name: Determining the Fedorov-Volodkina index of a child patient

C	PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods		
F	A/01.7	Patient examination. Making a diagnosis		
	Action		Performed	Not Performed
1.	Prepare a package with sterile dental instruments, prepare cotton swabs, Lugol's solution , and assess the expiration date.		1 point	-1 point
2.	Take 1 cotton roll with angled tweezers and place it in the area of the transitional fold of the vestibule of the oral cavity of the lower jaw on the left		1 point	-1 point
3.	Place the glass slide with a smooth surface on the dental table and drop 2 drops of Lugol's solution		1 point	-1 point
4.	Take the applicator from the container, soak it in Lugol's solution and apply staining to the vestibular surfaces of the lower front teeth.		1 point	-1 point
5.	Determine the digital value of the index The index is determined by the intensity of staining: 1 point - no staining; 2 points - a quarter of the crown surface is stained; 3 points –half of the surface is stained; 4 points – $\frac{3}{4}$ of the surface is stained; 5 points –the entire surface of the crown is stained. The index is calculated by summing the indices of each stained tooth, divided by 6. The final result determines the quality of oral hygiene: 1.1–1.5 — high; 1.6–2 — satisfactory; 2.1 – 2.5 — unsatisfactory; 2.6–3.4 — low; less than 3.5 - very low.		1 point	-1 point
	Total		5 points	

Assessment criteria:

"Pass" - at least 75% of required actions performed

"Fail" - 74% of required actions or less performed