

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Sumy State University

I APPROVE

Head of the admissions committee



04 2024

PROGRAM

**of the entrance examination for admission
to study for the degree of "Doctor of Philosophy"
in the specialty
221 Dentistry**

I. GENERAL PROVISIONS

The purpose of the entrance exams for obtaining the educational and scientific level "doctor of philosophy" in specialty 221 Dentistry is to assess the level of preparedness of the entrant to obtain the degree "doctor of philosophy" in professional matters of the dental field.

Persons with a higher education diploma (master's degree or specialist) are allowed to take the entrance exams for admission to study for the degree of "Doctor of Philosophy" in the specialty 221 Dentistry.

Preparation and passing of entrance exams are carried out in accordance with the schedule approved by the rector of the university.

Entrance tests are conducted from the main sections of dentistry: therapeutic dentistry and children's therapeutic dentistry, surgical dentistry and children's surgical dentistry, orthopedic dentistry and orthodontics.

The form of conducting entrance exams is a test. The allotted time for completing the exam tasks is 80 minutes. In case of doubt regarding the understanding of the questions formulated in the ticket, the entrant has the right to ask for an explanation from the members of the commission.

During the entrance test, entrants are not allowed to use mobile phones, tablets and other electronic devices of communication and information processing. The use of any information carriers is also prohibited.

The work of the subject committee is carried out within the established deadlines.

2. TYPICAL QUESTIONS FROM THE SECTIONS THAT ARE SUBMITTED FOR ENTRANCE EXAMS

1.

1. List of questions from the section "Therapeutic dentistry and children's therapeutic dentistry"

1. Scheme of examination of a dental patient. Examination methods. Characteristics of pain syndrome in various dental lesions.
2. Plaque and calculus. Formation mechanism. Structure, physical properties, chemical composition, microflora. Removal methods. Conducting professional oral hygiene. Evaluation of the effectiveness of plaque and tartar removal.
3. Tooth decay. Definition of the concept. Statistical indicators of tooth caries. Classification of caries. Concept of structural and functional resistance of hard tooth tissues. Determination of enamel resistance (ter-test).
4. Acute and chronic caries in the spot stage. Pathomorphology, clinic, diagnosis, differential diagnosis, treatment. Principles of remineralizing therapy.
5. Acute and chronic surface caries: pathomorphology, clinic, diagnosis, differential diagnosis, treatment. Acute and chronic medium caries: pathomorphology, clinic, diagnosis, differential diagnosis, treatment.
6. Acute deep caries: pathomorphology, clinic, diagnosis, intra- and extra-syndromic differential diagnosis, treatment.
7. Treatment of multiple caries: general and local. Medicinal products: groups, dosage, methods of use.
8. Caries prevention. The value of individual and social prevention. Means of prevention. Organization of dental caries prevention of pregnant women, conscripts, and workers of certain industries. Performance evaluation.
9. Endogenous prevention of dental caries in children.
10. Exogenous prevention of dental caries in children.
11. Non-cariou lesions of teeth. Patrikeev's classification. Pathomorphology, clinic and diagnosis of non-cariou lesions occurring before teeth erupt.
12. Pathomorphology, clinic, diagnosis and treatment of non-cariou lesions occurring after teeth eruption.
13. Pulpitis. Etiology, pathogenesis, classification (E.M. Gofung, CMI (1964), ICD-10), their positive qualities and shortcomings.
14. Acute forms of pulpitis: pathomorphology, clinic, diagnosis, differential diagnosis.
15. Chronic forms of pulpitis: pathomorphology, clinic, diagnosis, differential diagnosis.
16. Vital methods of treatment of pulpitis. Method of treatment. Medicines, their prescription. Effectiveness of use and possible complications.

17. Devital methods of treatment of pulpitis. Indications, stages of treatment, modern technologies. Possible complications and their elimination. Effectiveness of the method
18. Sealers and fillers for sealing root canals in case of pulpitis: groups, properties, indications for use, sealing technique.
19. Periodontitis: etiology, pathogenesis, classification (I.H. Lukomskyi, M.I. Groshikova, ICD-10). Pathological anatomy of acute and chronic periodontitis.
20. Acute and chronic forms of apical periodontitis: etiology, pathogenesis, clinic, diagnosis, differential diagnosis.
21. Treatment of acute and chronic forms of apical periodontitis of single-rooted and multi-rooted teeth. Principles of treatment. The sequence and features of treatment stages. Effectiveness of treatment.
22. Diseases of periodontal tissues. Terminology, classification of periodontal diseases. Peculiarities of clinical examination of patients with pathology of periodontal tissues. Basic clinical methods.
23. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment of inflammatory periodontal diseases.
24. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment of dystrophic-inflammatory periodontal diseases. The role of local and general factors.
25. Classification of diseases of the mucous membrane of the oral cavity (M.F. Danylevskyi, P.T. Maksymenko, IDC-10). Peculiarities of the examination of patients with oral mucosa diseases. Primary and secondary elements of the lesion. Primary (independent) lesions of the mucous membrane of the oral cavity.
26. Infectious diseases. Etiology, pathogenesis, manifestations on the mucous membrane of the oral cavity. Diagnostics. Tactics of a dentist.
27. Changes in the mucous membrane of the oral cavity in some somatic diseases, allergic lesions and exogenous intoxications.
28. Diseases of the tongue and lips. Precancerous diseases of the mucous membrane of the oral cavity and the red border of the lips. Stomatogenic chronic intoxication.
29. Damage to the hard tissues of temporary and permanent teeth in children: caries, enamel hypoplasia, fluorosis, hereditary malformations: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention.
30. Pulpitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention.
31. Periodontitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention. Injury to temporary and permanent teeth in children.
32. Diseases of periodontal tissues in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention.

33. Diseases of the mucous membrane of the oral cavity (traumatic, viral, fungal, allergic and in diseases of internal organs and systems) in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention.

34. Comprehensive assessment dental status of the child. Drawing up an individual plan for remediation of the child's oral cavity and dental prevention and their implementation. Examination of children at the dentist.

35. Program for the prevention of dental diseases. Its components, stages of implementation, evaluation of effectiveness.

2. List of questions from the section "Surgical dentistry and children's surgical dentistry"

1. Method of examination of the oral cavity, jaws, face, and neck. Pain, its components, leading pathways of pain. The value of pain in medicine, dentistry.

2. Methods of tooth extraction, indications and contraindications for tooth extraction, patient preparation for surgery. Complications during tooth extraction and in the postoperative period: clinic, diagnosis, treatment, and prevention.

3. Local potentiated analgesia. General anesthesia. Cardiopulmonary resuscitation. Local anesthetics, their properties, side effects.

4. Application, infiltration anesthesia. Complications, their prevention, and treatment. Tooth extraction under applied, infiltration anesthesia. Central conduction methods of analgesia of the jaws and adjacent tissues.

5. Periodontitis: classification, clinic, prevention, surgical methods of treatment. Odontogenic granuloma of the face: clinic, treatment. Odontogenic periostitis of the jaws (acute, chronic): clinic, diagnosis, treatment, complications, physiotherapy.

6. Acute and chronic odontogenic osteomyelitis of the jaws: etiology, pathogenesis, classification, clinical course, differential diagnosis, prevention, treatment, complications, their prevention.

7. Teething diseases. Impressed and semi-impressed teeth. Pericoronitis: clinic, diagnosis, treatment, complications.

8. Specific inflammatory processes of the maxillofacial area (actinomycosis, tuberculosis, syphilis), AIDS: classification, clinical course, diagnosis, treatment.

9. Arthritis and arthrosis of the temporomandibular joint (TMJ): classification, clinical course, diagnosis, treatment, complications, and prevention. TMJ pain dysfunction syndrome.

10. Phlegmons and abscesses of the maxillofacial area: classification, etiology, pathogenesis, clinic, course, principles of treatment, prevention of complications.

11. Inflammatory process of the maxillofacial area: etiology, pathogenesis, types of clinical reactions and features of the course of odontogenic inflammatory diseases. The role of the immune, hormonal, vascular, blood coagulation system, etc.

12. Complications of inflammatory processes arising from phlegmon localized around the upper and lower jaw. Infectious-toxic shock.
13. Acute and chronic odontogenic sinusitis: etiology, pathogenesis, classification, clinic, differential diagnosis, prevention, treatment, complications. Plastic removal of the oro-antral connection.
14. Acute and chronic sialadenitis, salivary stone disease: etiology, classification, clinic, diagnosis, prevention, treatment, prevention of complications.
15. Organization of specialized care for patients with precancerous and tumor lesions of the maxillofacial area. Principles of the international classification of tumors. Methods of examination of patients with tumors and precancerous diseases of the maxillofacial region.
16. Jaw cysts; classification, clinic, diagnosis and treatment. Cysts and fistulas of the face and neck: clinic, diagnosis, and treatment. Glandular cysts. Methods of diagnosis and surgical treatment.
17. Odontogenic tumors and tumor-like lesions. Morphological features. Clinic, diagnosis, and treatment. Bone-forming tumors: morphological features, clinic, diagnosis, and treatment.
18. Tumor-like lesions: fibrous dysplasia, eosinophilic granuloma, deforming osteitis, "brown tumor" of hyperparathyroidism, aneurysmal and solitary bone cyst. Morphological features. Clinic, diagnosis, and treatment.
19. Precancerous diseases of the face and oral cavity. Classification. Clinic, diagnosis, and treatment. Malignant tumors of the skin of the face: basal cell and squamous cell cancer, malignant melanoma, fibrosarcoma.
20. Malignant tumors of the organs of the oral cavity, lips, jaws. Morphological features. Clinic, diagnosis, and treatment. Methods of operations on the jaws for tumors and tumor-like lesions.
21. Tumors of salivary glands. Morphological features. Clinic, diagnosis, and treatment. Peculiarities of the postoperative course and care of cancer patients. Rehabilitation and dispensation of patients with maxillofacial tumors.
22. Provision of emergency medical aid in case of traumatic, painful shock at the stages of treatment, damage to facial vessels, in case of various types of asphyxiation. Modern methods of treatment of the syndrome of long-term compression of facial tissues. Neurological changes after trauma.
23. Surgical methods of treating wounds of soft tissues of the maxillofacial region, types of sutures. Modern methods of diagnosing facial tissue damage. Osteosynthesis at facial bone fractures, biological principles of bone tissue regeneration. Distraction-compression methods of treatment of bone fractures of the maxillofacial area.
24. Combined and combined tissue damage of the maxillofacial area. Diagnosis, clinic, treatment of fronto-facial, cranio-facial trauma. Diagnosis, complications of craniofacial injuries in modern conditions.
25. The purpose and tasks of restorative maxillofacial surgery. Planning of restorative operations, preparation of patients. Plastic with local fabrics. Indications,

technique of operations. Free tissue transplantation. Skin and bone plastic. Free transplantation of combined grafts.

26. Anatomical and functional disorders in injuries of different localization, their impact on the child's body. Classification. Features of damage to teeth, soft tissues of the maxillofacial region and bones of the facial skeleton in children of different age groups: clinic, diagnosis, methods of treatment, prognosis. Temporomandibular joint damage. Clinic. Diagnostics.

27. Burns of the face and oral cavity organs in children of different age groups: clinic, diagnosis. Burn disease in children, features of the course in children of different age groups. Peculiarities of clinical manifestations of combined and combined trauma in children of different age groups.

28. Standards for the organization of specialized care for patients with traumatic injuries of the face, oral cavity organs, and jaw bones. First aid for children of all ages with maxillofacial injuries. Aiding in polyclinic conditions. Indications for hospitalization of the child.

29. Methods of surgical and combined treatment of injuries of the maxillofacial area in children of different age groups. Postoperative withdrawal. Rehabilitation and dispensation of children with traumatic injuries of the face, oral organs, jawbones. Prevention of maxillofacial trauma in children.

30. Etiology and pathogenesis of congenital nonunions of the upper lip. Genetic aspects of congenital nonunions of the upper lip. Congenital nonunion of the upper lip: classification, clinic, functional disorders.

31. Organizational principles of providing medical care to children with congenital nonunions of the upper lip. Principles of cheiloplasty for unilateral and bilateral malformations of the upper lip. Orthodontic treatment of children with congenital nonunions of the upper lip. Examination of children with congenital nonunions of the upper lip.

32. Etiology and pathogenesis of congenital nonunions of the palate. Genetic aspects of congenital nonunions of the palate. Congenital nonunions of the palate: classification, clinic, functional disorders. Organizational principles of providing medical care to children with congenital non-union of the palate.

33. Principles of performing uranostaphyloplasty for through-and-through and isolated malformations of the hard and soft palate. Orthodontic treatment of children with congenital nonunions of the upper lip and palate at the stages of medical and social rehabilitation. Speech therapy rehabilitation of children with congenital non-unions of the upper lip and palate. Examination of children with congenital non-unions of the palate.

34. Anatomical-physiological features of the child's body affecting the general patterns of tumor processes in the maxillofacial area. Acquired and congenital tumor-like neoplasms of the face and oral cavity in children. Clinical and morphological features of the development and course of congenital tumor-like neoplasms of the soft tissues of the face in children.

35. Tactics of management of patients with tumor-like neoplasms of soft tissues of the face and jaws in the conditions of a polyclinic, a specialized hospital

and at the stages of dispensary observation. Principles and methods of surgical treatment of tumor-like formations of soft tissues of the face and jaws in children of different age groups. Rehabilitation and dispensary observation.

3. List of questions from the section "Orthopedic dentistry and orthodontics"

1. Peculiarities of bite development in different age periods.
2. Basic additional research methods in orthodontics and their characteristics.
3. Treatment methods in orthodontics. Principles of action and indications for use.
4. Anomalous neutral bite (anomalies of individual teeth and dental rows). Etiology, pathogenesis, clinical features, diagnosis, treatment, and prevention in different age periods.
5. Sagittal bite abnormalities. Classification, etiology, pathogenesis, clinic, treatment, and prevention in different age periods.
6. Vertical bite anomalies. Classification, etiology, pathogenesis, clinic, treatment, and prevention in different age periods.
7. Transverse bite anomalies. Classification, etiology, pathogenesis, clinic, treatment, and prevention in different age periods.
8. Congenital malformations of the face and jaws (cleft defects). Causes, classification, clinic, diagnosis. Features of orthodontic treatment and prevention.
9. Defects of teeth and dentition in children and adolescents. Indications and features of prosthetics in different age periods.
10. Errors and complications in orthodontic treatment. Dispensary in orthodontics.
11. Orthopedic dentistry. Definition, goal, task. The main directions of development of this science. Contribution of Ukrainian scientists to the development of orthopedic dentistry.
12. Anatomy of the upper and lower jaws. Buttresses. Temporomandibular joint. Features of structure and function. Age changes. Reconstruction in the joint when the bite height changes.
13. The mechanism of movements of the lower jaw in the sagittal direction, transversal direction. Articulation, occlusion. Types of occlusion and their signs. The concept of relative "physiological calm" and the height of the lower part of the face.
14. The structure of the tooth rows, their shape on the upper and lower jaws. Bite. Types of bites. their morpho-functional characteristics. Occlusal surface. Prosthetic plane. Sagittal and transverse occlusal curves.
15. Classification of dentition defects according to A.I. Betelman, Kennedy, their importance in the clinic of orthopedic dentistry. Functional methods of determining masticatory efficiency.

16. Impressions. Classification. Methods of obtaining. Requirements for impressions. Materials used for their production. Impression trays. Classification. Selection criteria.

17. Inlays. Classification. Indications and clinical and laboratory stages of making inlays. Materials used for making inlays.

18. Crowns. Classification of crowns. Requirements for artificial crowns. Indications for covering a tooth with a crown. Clinical and laboratory stages of production.

19. Bridge-shaped dental prostheses. Indications and contraindications for restoration of the integrity of tooth rows with bridge-like prostheses. Clinical and laboratory stages of production.

20. Partial removable lamellar prostheses. Indications for use. Clinical and laboratory stages of manufacturing partial removable lamellar prostheses.

21. Indications for the manufacture of clasp prostheses. Clinical and laboratory stages of the production of clasp prostheses. Ney system clasps. Telescopic clasps, locking component fasteners, beam fasteners.

22. Examination of the oral cavity in edentulous patients. Classification of toothless jaws. Classification of the condition of the mucous membrane of the edentulous jaw. Limits of the prosthetic bed in the manufacture of complete removable prostheses.

23. Methods of manufacturing rigid individual trays. Fitting individual trays according to the Herbst method. Methods of obtaining functional impressions of edentulous jaws.

24. Methods of determining the neutral position of the jaws. Stages of determination of central relation during prosthetics of edentulous jaws. Possible errors, their causes, manifestations, and consequences.

25. Clinical and laboratory stages of manufacturing complete removable prostheses.

26. Fixation, stabilization and balance of complete removable prostheses and the factors that provide them. Topography of the valve zone of the upper and lower jaws.

27. Implantation in orthopedic dentistry. Indications and contraindications. Conditions necessary for successful implantation of implants. Types of implants, materials for their manufacture.

28. Peculiarities of denture prosthetics in the presence of implants in the oral cavity. Materials used in implantology.

29. Complications in orthopedic treatment with the use of implants. Prevention of complications. Forecast.

30. Orthopedic devices used in maxillofacial orthopedics. Classification. Mechanism of action. Methods of fixation.

31. Basic principles of orthopedic treatment of fractures of the bones of the facial skull. First medical aid for fractures of the maxillofacial bones.

32. Jaw contractures. Classification. Etiology. Pathogenesis. Clinic. Treatment and prevention. Microstomia. Clinic. Peculiarities of orthopedic treatment.

33. Facial defects. Etiology, pathogenesis, clinic. Ectoprostheses. Materials and manufacturing methods, methods of fixation.

34. Organization of dental care in the Armed Forces of Ukraine in peacetime. Provision of orthopedic dental care to the maxillofacial wounded during the evacuation stages.

35. Organization of medical care for the maxillofacial area in the navy.

3. STRUCTURE OF EXAMINATION TASKS

The entrance test is conducted in the form of answers to the test tasks of the examination ticket.

The entrant receives one of the options of the examination ticket by blind selection (sample - Appendix 1). He is provided with a separate answer sheet with a code, on which he independently assigns the number of the received variant (sample - Appendix 2).

Each version of the examination tasks contains 50 tests of the same difficulty level from the sections of dentistry: therapeutic dentistry and children's therapeutic dentistry; surgical dentistry and children's surgical dentistry; orthopedic stomatology and orthodontics. There are 4 answer options in the test task, of which 1 is correct. In the answer sheet, the entrant marks the correct option.

4. EVALUATION CRITERIA FOR ANSWERS

General requirements

The commission evaluates the entrant's written answers to test tasks on a 100-point scale.

To receive a positive grade from the entrance test, the applicant needs to pass the minimum acceptable test threshold at the level of 0.30 or 30% of the total number of test points.

The received test scores for the entrance test are converted into a 100-point scale (with rounding to the nearest whole, according to the rules of mathematical rounding) according to the following algorithm:

$$O = O_{\min} + k \cdot (N - r \cdot T), \text{ where}$$

- O – mark from the entrance test on a 00-200 points scale;
- O_{\min} – the minimum score from the entrance test on a scale of 100-200 points, at which the entrant is allowed to participate in the competitive selection;
- k – the coefficient of transfer of test scores to a scale of 100-200 points, while:

$$k = 100 / T \cdot (1 - r)$$

- r – the minimum acceptable test threshold with an accuracy of up to 0.01, which is set in the range from 0 to 1, but not less than 0.10;
- T – the total number of test points that the entrant can receive during the entrance test;
- N – the number of test points that the entrant received during the entrance test.

Provided that the number of test points that the entrant received during the entrance test (N) is "0", then the entrant receives an "unsatisfactory" grade and is not allowed to participate in the competitive selection.

Calculation of test points

For each correct answer to a test question, 2 test points are awarded. Incorrect answer - 0 points.

Total number of test points (T), which the entrant can receive during the entrance test - 100 test points.

The number of test points for the entrance test (N) is calculated as the sum of test points excluding test points removed for corrections in the answer sheet (if provided by the program).

Corrections Policy

For each correction, 1 test point is deducted from the total number of test points (T), which the entrant can get on the entrance exam.

5. LIST OF RECOMMENDED SOURCES

1. Oral mucosa/ MA Luchynskyj, Hasyuk NV, Zaliznjak M.S., Boitsaniuk S.I., Manashchuk NV, Pohoretska Kh.V., Patskan L.O., Levkiv M.O., Antonyshyn I.V., Tsvyntarna I. Ya., Chornij NV, Sukhovolets I.O., Ph.D. Drevnitska RV, Ph.D. Radchuk VB// Ternopil - 2022, 36p
2. Clinical manifestations and differential-diagnostic criteria of non-carious lesions of teeth: textbook / SI Boitsaniuk, OP Andriyishyn, MO Levkiv, NV Manashchuk, NV Chornij // Ternopil. – 2021. - 125 P.
3. Dental caries and its complications in tables and schematic diagrams: textbook/ SI Boitsaniuk, MO Levkiv, I.Ya. Tsvyntarna, IV Antonyshyn // Ternopil -2022 - PE Palyanytsya VA,- 151p.
4. Diseases of the lips: manual OV Rybalov TA Petrushanko I.Yu. Litovchenko Yu.V. Sidash Poltava, 2019 - 276 p.

5. Pharmacotherapy in Dentistry: manual / VM Bobyriov, TA Petrova, G. Yu. Ostrovska etc. — Vinnytsya: Nova Knyha, 2020. — 376 p.
6. Tkachenko IM, Marchenko IY, Shundrik MA Algorithms of practical skills in propaedeutics of therapeutic dentistry /— Poltava: “ASMI”, 2021. — 160 s.
7. Gutor, N. S. Algorithms for performing practical skills in surgical dentistry [Text]: manual / N. S. Gutor, Ya. P. Nagirnyi. - 2nd ed., add. — Ternopil: Ukrmedknyga, 2019. — 124 p.
8. Manashchuk N.V., Chorniy N.V., Luchynskiy M.A., Boytsanyuk S.I. etc. Practicum course in periodontology: teacher. manual / Ternopil, Ukrmedknyga, 2020. — 108 p.
9. Moskalenko, P. O. Inflammatory odontogenic diseases of the maxillofacial area [Text]: lecture notes / P. O. Moskalenko. — Sumy: Mriya-1, 2019. — 106 p.
10. Examination of children with surgical diseases of the maxillofacial area: a study guide / Yakovenko L.M., Chekhova I.L., Yefimenko V.P., Kiselyova N.V., Egorov R.I., Kovtun T.O., Shafeta O.B., V.V. Filonenko, A.O. Melnyk, V.V. Ododiuk, A.O. Yakovenko; edited by Prof. L.M. Yakovenko — Kyiv: Kniga-plus, 2022. — 164 p.
11. Oncology for dental interns: teacher. manual / E. V. Kuzenko, Yu. V. Moskalenko, O. O. Dyachenko; under the editorship A. M. Romaniuk. — Sumy: Sumy State University, 2020. — 110 c.
12. Orthopedic dentistry: textbook / M.M. Rozhko, V.P. Nespryadko, I.V. Paliichuk and others. - K.: All-Ukrainian Specialized Publishing House "Medytsina", 2020. - 720 p.
13. Propedeutics of children's therapeutic dentistry: textbook / L.O. Khomenko, O.I. Ostapko, N.V. Bidenko et al. ; under the editorship Prof. L.O. Khomenko - 2nd ed., corrected. and additional - Kyiv: Book-plus, 2021. -312 p.
14. Propedeutics of orthopedic stomatology: a textbook / P.S. Flis, H.P. Leonenko, I.A. Shinchukovskiy et al. ; under the editorship PS Fleece. — 2nd edition. — Kyiv: Medicine, 2020. — 328 p.
15. Prevention of dental diseases: teaching. manual / N. I. Smolyar, O. M. Humenyuk, T. P. Kravets, and others.; in general ed.: N. I. Smolyar, O. M. Humeniuk. — Lviv: Magnolia 2006, 2023. — 368 p.
16. Therapeutic dentistry: in 4 volumes. Volume 2. Therapeutic dentistry: a textbook / M.F. Danylevskiy, A.V. Borysenko, L.F. Sidelnikova and others. — 4th edition.-2020.-p.456.
17. Flis, P. S. Orthodontics: a textbook / P. S. Flis, M. A. Omelchuk, N. V. Rashchenko, I. L. Skrypnyk [and others]; Ministry of Health of Ukraine, National Medical University named after O.O. Bogomolets - Vinnytsia: New Book, 2019. — 311 p.
18. Surgical stomatology and maxillofacial surgery of childhood: National. sub / L.M. Yakovenko, V.G. Cherkasov, I.L. Chekhov and others; edited by Prof. L.M. Yakovenko - Kyiv: VSV "Medicine", 2022. - 496 p.

Approved at a meeting of the admissions committee
Protocol No. 11 of 08/042024 p.

Responsible secretary of the
admissions committee



Ihor ROY

Head of the
subject commission



Lakhtin Yu.V.

SUMY STATE UNIVERSITY

I APPROVE
Head of the admissions committee

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EXAMINATION TASK

**of the entrance examination for admission
to study for the degree of "Doctor of Philosophy"
in the specialty
221 Dentistry**

Option No. _____
(mark the number)

- 1. What is a direct root inlay?**
 - A. A wax reproduction is modeled "in the patient's mouth", which is later cast from metal.
 - B. A wax reproduction modeled by a dental technician in a laboratory, which is later cast from metal.
 - C. An anchor pin covered with glass ionomer cement is screwed into the root canal.
 - D. A passive pin covered with a composite material is cemented in the root canal.

- 2. The main clinical sign that distinguishes hypoplasia from caries in the spot stage:**
 - A. painfulness during probing
 - B. positive reaction to percussion
 - C. localization and stability of the lesion
 - D. radiographic changes

3. During the endodontic treatment of periodontitis of tooth 16, the instrument broke in the middle third of the medial-buccal root. Choose a treatment method.
- A. Amputation of the medial buccal root.
 - B. Hemisection of the medial buccal root.
 - C. Coronal-radicular separation.
 - D. Resection of the apex of the medial-buccal root.
4. What is the peculiarity of the entrance hole of the carious cavity in chronic surface caries?
- A. Point entrance.
 - B. Entrance hole without overhanging edges.
 - C. A defect in the form of a carious spot
 - D. Entrance opening with overhanging edges.
5. A conglomerate of microorganisms, epithelial cells, leukocytes, saliva components and food residues are called:
- A. Tartar
 - B. Soft dental plaque
 - C. Dental plaque
 - D. Pelicula
6. The chemical method of removing dental plaque involves the use of the following drugs:
- A. Magenta.
 - B. A weak solution of organic acids.
 - C. Methylene blue.
 - D. Lugol's solution.
7. Which of the following factors can affect caries resistance?
- A. Fluorine and other trace elements.
 - B. There is no correct answer.
 - C. Microorganisms of the oral cavity and dental plaques.
 - D. Violation of mineral metabolism.
8. Parodont is:
- A. tooth, gum, periodontium.
 - B. tooth, gum, root cement.
 - C. gum, periodontium, alveolar bone.
 - D. gum, periodontium, alveolar bone, tooth.
9. What index determines the need for treatment of periodontal diseases and its volume:
- A. PMA index.

- B. Fedorov-Volodkina index.
- C. Green-Vermillion index.
- D. CPITN index.

10. Which of the drugs is contraindicated in hypertrophic gingivitis?

- A. Heparin.
- B. Chlorhexidine.
- C. Methyluracil.
- D. Stomatidine.

11. Basic principles of treatment of localized periodontitis:

- A. Elimination of traumatic factors, anti-inflammatory therapy, orthodontic treatment.
- B. Elimination of the inflammatory process in the periodontium, stimulation of the body's protective forces, elimination of traumatic factors.
- C. Elimination of local traumatic factors, drug therapy, curettage of periodontal pockets, rational filling and prosthetics.
- D. General strengthening therapy, elimination of local irritating factors, rational prosthetics.

12. Traumatic occlusion is:

- A. Closing of the tooth rows with the lower jaw pushed forward.
- B. Functional overload of periodontal tissues.
- C. Multiple contact of tooth rows.
- D. The ratio of the teeth of the upper and lower jaw in the closed state.

13. What drugs are used to stimulate epithelial formation in gingivitis?

- A. Nonsteroidal anti-inflammatory.
- B. Antiseptics.
- C. Keratoplasty.
- D. Immunomodulators.

14. When examining a periodontological patient, the depth of the oral cavity is 14 mm. What is the depth of the hairline?

- A. Average.
- B. Deep.
- C. Small.
- D. Normal.

15. For periodontitis, X-ray signs are manifested in the form of:

- A. Violation of the integrity of the cortical layer
- B. A uniform decrease in the height of the interalveolar septa
- C. Tendency to the formation of a small looped pattern
- D. All answers are correct.

- 16. Catarrhal gingivitis of mild severity includes inflammation of the gums:**
- A. Papillary part.
 - B. Papillary and marginal.
 - C. Marginal and alveolar.
 - D. Alveolar, marginal, papillary.
- 17. Which epulis do not exist?**
- A. Angiomatous.
 - B. Giant cells.
 - C. Fibromatous.
 - D. Fibro-angiomatous.
- 18. The facial nerve is:**
- A. Secretory nerve.
 - B. Taste nerve.
 - C. Sensitive nerve.
 - D. Motor nerve.
- 19. Color test for identification of novocaine according to I.H. Lukomsky is held with:**
- A. Chloramine.
 - B. Acetylsalicylic acid.
 - C. Formalin.
 - D. Potassium permanganate.
- 20. Specify the stages of dispensation:**
- A. Planned rehabilitation.
 - B. Transition to dispensary.
 - C. Prevention in the dispensary system.
 - D. Everything is correct.
- 21. A color test for the identification of novocaine, proposed by A.E. Hutsan and I.F. Muntianu, is made with:**
- A. Potassium permanganate.
 - B. Acetylsalicylic acid.
 - C. Formalin.
 - D. Chloramine.
- 22. The drug, articaine, containing:**
- A. Narcaine;
 - B. Ubistezin;
 - C. Duracaine;
 - D. Everything is correct;

23. In what concentrations is lidocaine used for conduction anesthesia?:

- A. 0.5%;
- B. 5.0%;
- C. 10.0%;
- D. 2.0%.

24. In what concentration is lidocaine used for applied anesthesia?:

- A. 0.5%;
- B. 10.0%;
- C. 2.0%;
- D. 5.0%.

25. The chemical structure of ultracaine is:

- A. ethyl ester of carboxylic acid tartrate;
- B. ethyl ether of paraaminobenzoic acid hydrochloride;
- C. a-diethylamino-2,4,6-trimethylacetanilide hydrochloride;
- D. articaine hydrochloride .

26. How long will the hematoma fill?:

- A. until the vessel is thrombosed;
- B. until the blood clots in the hematoma;
- C. until the pressure in the blood vessels and surrounding tissues is balanced;
- D. all answers are correct;

27. The compact plate of the lower jaw, in contrast to the one on the upper jaw:

- A. less dense and less thick;
- B. less dense and thick;
- C. denser and less thick;
- D. denser and thicker.

28. Which anesthesia uses lower concentrations of anesthetics?

- a) with infiltration;
- b) with conductive;
- c) at the central
- d) all answers are correct.

29. After 2-3 days, the hematoma is prescribed:

- A. cold (ice);
- B. dry heat;
- C. novocaine electrophoresis;
- D. phonophoresis with hydrocortisone.

30. The Trendelenburg position is when:

- A. while sitting in a chair, the patient's head is tilted forward;
 - B. the patient lies on his side;
 - C. the patient lies on his back;
 - D. the head is below the patient's legs (in a horizontal position).
- 31. The lowering of the corner of the mouth, the lower eyelid, the smoothness of the nasolabial fold are observed when the innervation is disturbed.**
- A. facial nerve;
 - B. trigeminal nerve;
 - C. ear ganglion;
 - D. everything is wrong.
- 32. Skin ischemia occurs because of:**
- A. anesthetic overdose;
 - B. vasoconstrictors;
 - C. allergic reaction;
 - D. injuries;
- 33. Functional paresis of facial muscles passes through?**
- A. after cessation of anesthetic action;
 - B. 2-3 months;
 - C. 2-3 days;
 - D. 2-3 hours;
- 34. Blockade of which type of sensitivity is observed during conductor anesthesia?**
- A. tactile
 - B. painful;
 - C. taste;
 - D. secretory
- 35. In which type of bite is there a protrusion of the upper teeth forward?**
- A. Orthognathic
 - B. Open
 - C. Progenic
 - D. Direct
- 36. What is the angle formed by the line drawn through the beginning and end of the articular path with the occlusal plane?**
- A. 45°
 - B. 0°
 - C. 30°
 - D. 10°

37. Define the concept of "Bennett movement»:

- A. Displacement of the joint head on the balancing side with lateral displacement of the lower jaw
- B. Displacement of the joint head on the working side with lateral displacement of the lower jaw
- C. Displacement of the joint head when opening the mouth
- D. Displacement of the joint head when opening or closing the mouth

38. The buccal and palatal surfaces of teeth 15 and 25 are polished during the manufacture of stamped metal crowns :

- A. To the level of the neck of the tooth
- B. By 0.3 mm
- C. By 0.5-1 mm
- D. By 0.8 mm

39. Which of the muscles located around the oral cavity closes the oral cavity during chewing

- A. Chin
- B. Large zygomatic muscle
- C. The muscle that lifts the corner of the mouth
- D. Muscle depressor of the corner of the mouth

40. Which arch is narrower on the upper jaw?

- A. There are the same
- B. Zygomatic
- C. Alveolar
- D. Basal

41. An 18-year-old conscript is examined by the military committee's medical commission. Objectively: 36 and 46 teeth are missing. What is chewing efficiency according to Agapov?

- A. 80%
- B. 82%
- C. 76%
- D. 74%

42. What is the path of the lower incisors called when pushing the lower jaw forward?

- A. Trajectory of movement of incisors
- B. All of the above is incorrect
- C. Articular way
- D. Sagittal incisal path

- 43. What devices can be used in the manufacture of a stamped crown?**
- A. Soldering machine
 - B. Parker's device
 - C. "Samson" device
 - D. All the listed devices
- 44. The relationship between tooth rows in the state of central occlusion is called ...**
- A. Pathological bite
 - B. Physiological bite
 - C. By biting
 - D. A state of physiological rest of the lower jaw
- 45. During the dental examination, it was found that the central incisor of the lower jaw is mobile in the vestibulo-oral direction. What degree of pathological mobility does this correspond to?**
- A. III
 - B. AND
 - C. IV
 - D. The detected mobility of the tooth is physiological
- 46. Define the term "Articulation":**
- A. The relationships of the tooth rows during the physiological rest of the lower jaw are determined
 - B. Different positions and movements of the lower jaw in relation to the upper jaw
 - C. This is the closing of the tooth rows
 - D. The totality of all dynamic and static moments Between the jaws, with different positions of the lower jaw
- 47. Palpation of the temporomandibular joint is carried out by pressing on the area...**
- A. From the side of the auditory canal when performing movements of the lower jaw
 - B. From the side of the auditory canal when the lower jaw is at rest
 - C. In front of the bridge of the ear when performing movements of the lower jaw
 - D. In front of the bridge of the ears, the lower jaw is at rest
- 48. The graphic method of studying chewing movements of the lower jaw is called:**
- A. Arthrography
 - B. Myography
 - C. Myotonometry

D. Mastication

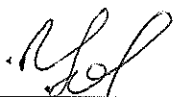
49. What abrasive tools should be preferred when removing a stamped metal crown from stainless steel?

- A. All of the above
- B. None of the above
- C. Carbide
- D. Steel

50. What muscles are attached to the upper jaw

- A. Mimic
- B. Lateral and medial pterygoid
- C. Mimic and chewing
- D. None of the above

Head
subject commission



(signature)

Lakhtin Yu.V.
(surname, initials)

SUMS STATE UNIVERSITY

Cipher _____

ANSWER SHEET

entrance exam for admission to study
to obtain the degree of "Doctor of Philosophy" in the specialty

221 Dentistry

Educational and scientific program - **Dentistry**

Option No. _____

question №	A	B	C	D	question №	A	B	C	D	question №	A	B	C	D
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	36	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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17	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	34	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

WARNING!!! THERE ARE SEVERAL ANSWER options, of which only one can be correct. Choose the option that you think is correct and mark it as shown in the sample. **2.0 points** are awarded for each correct answer (0 points for an incorrect answer). The maximum number of points is **100**. Points are deducted for the presence of corrections in the answer sheet, 1 point is deducted for each correction. The total number of points for the test task is calculated by adding the points for each question.

The number of corrections affects the overall rating of the work!

A	B	C	D
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Number of correct answers — ; The number of points for — ;
them
Number of corrections — ; Deduct points for — ;
corrections

Total points
including withdrawals — ; **Mark** — (number and letter)

Head of Commission _____
(signature) (surname, initials)

Members of the _____
commission (signature) (surname, initials)

(signature) (surname, initials)

(signature) (surname, initials)