National Dental Specialty Examination

Protocol

2024 Examination Cycle

Last Updated: December 18 2023

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Section 1 - General Examination Information

1.1 About the National Dental Specialty Examination (NDSE)

The purpose of the NDSE is to test entry-level competencies required of specialists. The NDSE covers general specialty knowledge including basic sciences, clinical diagnosis, and treatment planning. The level of knowledge required is consistent with Commission on Dental Accreditation of Canada requirements in each of the specialties.

The NDSE is a six-hour examination, delivered electronically, with one or more breaks. The number of questions and question values will vary depending on the specialty. Specifics for each dental specialty can be found in the corresponding parts of the protocol.

1.2 Examination Locations

The NDSE will be offered at test centres throughout Canada and the United States. There is no guarantee you will be able to take the examination in the city in which you are located. Space at examination centres may be limited and examination centre selection is on a first come first served basis.

1.3 Examination Preparation

1.3.1 Important Definitions

Differential Diagnosis: two or more likely diagnoses based on the information provided.

Emergency treatment: the urgent treatment required at this appointment for that specific clinical case.

Immediate management: the management required at that appointment for that specific clinical case.

Initial treatment: the first step in a more complex or comprehensive treatment or the first step in that specific clinical case.

Investigations: all investigations for that specific clinical case, and may include laboratory and clinical tests, radiographs, biopsies, etc.

Management: all patient centered therapies for that specific clinical case and may include restorative, surgical, pharmacological, non-pharmacological treatments, nutritional therapies, education, counseling, monitoring, and follow-up.

Most appropriate: the most suitable correct answer for that specific clinical case.

Example: the most appropriate management.

Most likely: the most probable correct answer for that specific clinical case.

Example: the most likely diagnosis.

Next step: the next step you would take in the management of that specific clinical case.

1.3.2 Examples of Formulations

Example of ONE treatment in the management of a specific clinical case

[Case history and periapical radiograph provided of tooth 2.6.]

Select ONE correct answer.

What is the most appropriate management of tooth 2.6?

○ Occlusal equilibration.

○ Non-surgical endodontic retreatment.

○ Surgical endodontic treatment (apicoectomy).

○ Extraction.

○ Observation and re-evaluation.

○ No treatment.

Example of ONE OR MORE treatments for the management of a specific clinical case

[case history, photograph and periapical radiograph of tooth 8.5.]

Select ONE OR MORE correct answers.

What is the most appropriate management of tooth 8.5?

○ Indirect pulp capping.

○ Direct pulp capping.

○ Direct restoration.

○ Pulpotomy.

○ Pulpectomy.

○ Extraction.

In the question above, tooth 8.5 would receive a pulpotomy and a direct restoration.

Example of ONE OR MORE treatment options for the management of a specific clinical case

[case history, photograph and periapical radiograph of tooth 8.5.]

Select ONE OR MORE correct answers.

What are appropriate management options of tooth 8.5?

○ Indirect pulp capping.

○ Direct pulp capping.

○ Direct restoration.

○ Pulpotomy.

○ Pulpectomy.

○ Extraction.

In the question above, tooth 8.5 would receive a pulpotomy and a direct restoration or could be extracted.

Example of ONE OR MORE diagnoses for a specific clinical case

[case history, photographs and radiographs]

Select ONE OR MORE correct answers.

What are the periodontal diagnoses?

○ Clinical gingival health.

○ Gingivitis.

○ Periodontitis.

○ Intact periodontium.

○ Reduced periodontium.

○ Non-periodontitis patient.

○ Stable periodontitis patient.

1.3.3 Tooth Numbering System

The FDI two-digit tooth numbering system is used in all examinations.

FDI / UNIVERSAL NUMBERING SYSTEM

PERMANENT DENTITION

FDI	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	FDI
Universal	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Universal
Universal	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	Universal
FDI	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	FDI

RIGHT   LEFT

PRIMARY DENTITION

FDI	5.5	5.4	5.3	5.2	5.1	6.1	6.2	6.3	6.4	6.5	FDI
Universal	A	B	C	D	E	F	G	H	I	J	Universal
Universal	T	S	R	Q	P	O	N	M	L	K	Universal
FDI	8.5	8.4	8.3	8.2	8.1	7.1	7.2	7.3	7.4	7.5	FDI

RIGHT   LEFT

1.4 NDSE Training Courses Statement

The RCDC is aware of third-party providers of test preparation courses. Be advised that the RCDC is not affiliated with, nor does it endorse any third-party providers of test preparation courses. The disclosure, distribution, solicitation and reconstruction of RCDC examination content is strictly prohibited, as is the use for commercial purposes of RCDC examination content, including the released examination material on the RCDC website.

1.5 Examination Confidentiality, Security, and Integrity

All RCDC content, including examination content, is the property of the RCDC. Unauthorized use, disclosure, reproduction, and publication of RCDC content is against the law and is strictly prohibited.

The RCDC has implemented security policies and measures to preserve the confidentiality and integrity of its examination content. These measures are in place to eliminate any unfair advantage among examinees and avoid the high costs associated with replacing compromised examination content.

1.6 Candidate Misconduct

All RCDC content, including examination content, is for personal use only. Any other use of RCDC content is strictly prohibited. Examples of prohibited use of RCDC content include but are not limited to receiving from or disclosing RCDC content, reproducing (through memorization or by any other means), and publishing any RCDC content in whole or in part. Conduct that compromises the confidentiality and integrity of the RCDC's processes and examinations will be

investigated and is subject to the RCDC's policies and procedures regarding candidate misconduct.

More information can be found on the RCDC website and in the RCDC NDSE Policies and Procedures.

1.7 Examination Day Regulations

Lack of adherence with any regulations below may result in an accusation of candidate misconduct and prevention of engaging in the examination:

- Candidates must be punctual for all sessions. If you arrive late for a session, you may be denied entry to the examination.
- Cell phones are prohibited in the examination room. They must be turned off and placed in the designated area for personal items.
- All watches are prohibited in the examination room. They must be placed in the designated area for personal items. Smart watches must be turned off.
- Devices with recording or transmitting and/or receiving abilities are prohibited in the examination room.
- You must empty all pockets before entering or leaving the examination room.
- Food is not allowed in the examination room.
- You will be required to read and agree to a Confidentiality and Non-disclosure Agreement before you can begin the examination.
- You cannot write on anything other than the scratch paper provided. The scratch paper and pencil must be submitted to Prometric staff at the end of the examination.

The RCDC may find it necessary to introduce new regulations or modify existing regulations for specific examination administrations. Any new or modified regulations will supersede regulations published in the protocol.

1.8 Test Accommodations

Test accommodations are granted on an individual basis and are dependent on the nature and extent of the request, documentation provided, and requirements of the examination.

More information can be found on the RCDC website and in the RCDC NDSE Policies and Procedures.

1.9 Exceptional Circumstances: Withdrawals, Compassionate Appeals, and Conduct of the Examination

1.9.1 Withdrawals

If, before the examination, you experience a serious medical circumstance or unanticipated exceptional circumstance beyond your control, you must withdraw from the examination. Notice of such a withdrawal should be provided in writing using the Withdrawal Form if possible before the examination, but no later than seven days following the examination. If applicable, supporting documentation must accompany the submission.

More information can be found on the RCDC website and in the RCDC NDSE Policies and Procedures.

1.9.2 Compassionate Appeals

If you believe you have been prevented from demonstrating your ability because of a serious medical circumstance or unanticipated medical circumstance during the examination, you can submit a compassionate appeal to have the results of the examination voided. Compassionate appeals must be submitted using the Compassionate Appeal Request Form within seven days of the examination.

More information can be found on the RCDC website and in the RCDC NDSE Policies and Procedures.

1.9.3 Conduct of an Examination

If, during the examination, you believe there may have been an irregularity or inconsistency in the conduct of the examination that prevented you from demonstrating your ability, it must be immediately reported to staff at the examination centre.

Should you want to submit an appeal based on the reported irregularity or inconsistency, it must be submitted in writing within seven days of the examination using the Appeal of the Conduct of an Examination Form.

More information can be found on the RCDC website and in the RCDC NDSE Policies and Procedures.

1.10 Results

Results are normally released within 10 weeks of the examination. You will receive an email notification when your results are available in your online profile.

Unsuccessful candidates will be provided with a letter identifying areas of low performance related to the domains in the examination blueprint.

Results will not be released by telephone, mail, or fax.

1.10.1 Appeals and Rescoring

If you are unsuccessful, you have 30 days to request a verification of your result.

There are two types of verification:

1. Rescore: Examinees who have failed the NDSE can request a verification of the calculation of the final grade. A rescore is unlikely to change your final grade as all failing results have already been re-calculated by RCDC staff.

2. Regrade: Examinees who have taken and failed may request re-evaluation of their score for the constructed responses only.

There are additional fees associated with the two types of verification listed above.

More information can be found on the RCDC website and in the RCDC NDSE Policies and Procedures.

NDSE Dental Public Health

Content

The NDSE in dental public health evaluates your knowledge of dental public health principles and public health issues.

Blueprint

Canadian specialists in dental public health are required to have broad knowledge and skills in the seven domains. The following blueprint shows the content areas and approximate percentage of questions (cases, topics, computer-based data analysis, and policy analysis) in each domain.

Dental Public Health Blueprint	Approximate % of questions
Assess community oral health status, needs, and resources	5-15%
Diagnose community oral health problems and identify the cause or strength of contributing factors	10-20%
Assess policies, strategies, programs, services, and devices that affect oral health and the provision of oral health services	15-25%
Plan activities or programs that would be worthwhile in improving oral health within the given ethical, legal, political, social, demographic, economic, and environmental context	10-20%
Manage oral health programs and human resources providing oral health care services, including conduct quality assurance programs and program evaluation.	5-15%
Assemble, synthesize, and communicate relevant, accurate and clear information that will enable individuals, families, communities, public and private health organizations, and government decision-makers to improve oral health	15-25%
Conduct education on and research into community oral health problems and services to assure a diverse and competent public oral health workforce and advancement of the specialty.	5-15%
Total	100%

Format

The examination will consist of three, two-hour parts of equal weight:

Part 1 will be a data analysis of dental epidemiologic data provided in a format similar to what would be collected using World Health Organization. (2013). *Oral health surveys: Basic methods* (5th ed.). An IBM SPSS® Statistics software data set will be provided on a PC laptop computer with a standard mouse. Data analysis skills will be assessed through a series of short- and long- answer questions.

Part 2 will be a policy analysis of a dental public health topic. A series of long-answer questions will be provided to assess your ability to analyze information provided in a written document, and to write and defend appropriate options for oral health policies to address the problems identified in the document.

Part 3 will consist of a mix of single and multiple-answer multiple-choice questions, and constructed response questions covering basic dental epidemiological principles and dental public health issues in Canada.

Data Analysis

Sample Case and Questions

You have been provided with a database containing epidemiologic examination records of 1000 seniors aged > 65 years. Your assignment is to determine if the prevalence and severity of root caries are independently affected by age and the smoking status of the senior. The age of the senior is obvious; the codes for the smoking status of the senior and the status of the teeth are shown below.

Senior's smoking status:

Never smoked	00
Smoked occasionally, less than one pack per week	01
Smoked 2 - 4 packs per week	02
Smoked one pack per day	03
Smoked more than 2 packs per day	04
Quit smoking more than 10 years ago	05
No response	09

Root status codes:

00 = Sound, no root decay ever or root not exposed
01 = Decayed root surface soft
02 = Decayed root surface hard
03 = Decayed root surface soft and extends beyond line angles
04 = Root surface filled
05 =Tooth missing due to caries
06 =Tooth lost due to trauma, or congenitally absent
07 = Sound abutment tooth or special crown (e.g., trauma anteriors)
08 = Tooth to be lost due to caries

What is the mean RCI for 65 and for 70 year old seniors? **2 points**

Mean RCI for 65 year old seniors	
Mean RCI for 70 year old seniors	

What is an appropriate statistical test and the P-value of that test to determine if the difference in means is significant at the 95% confidence level? **2 points**

Name of test	
P-value =	

Policy Analysis

You will be required to write a policy analysis on a dental public health topic. The following template identifies what should be included in your policy analysis.

1. Provide a title for the policy analysis.

2. Describe the history, context, and scope of the problem.

3. List a minimum of 3 potential options. Briefly describe each option. State the advantages and disadvantages of each option.

4. Identify at least 2 stakeholder groups and their likely positions.

5. Recommend one policy option.

6. Briefly justify the recommended policy option. Explain why the other options are not recommended.

7. Discuss a monitoring and evaluation strategy if that policy option was implemented.

8. Provide a summary.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer.".

Sample Question

Select **ONE** correct answer. **1 point**

What is the most likely cause of cervical caries on the maxillary primary incisors in a 12 month old child?

○ Lack of systemic fluoride.
○ Poorly formed enamel.
○ Lack of calcium during pregnancy.
○ Excessive bottle use.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.

Constructed-response questions

Sample Question

Distinguish between a descriptive and an analytical study. Give one example of each type of study. **2 points**

| |
| |
| |

Sample Question

Fluoridation has recently been challenged as a public health intervention by a small group of committed individuals who oppose the public health measure. What are 2 major objections raised by antifluoridationists? What is the scientific evidence that refutes each objection?

4 points

Objection	Evidence

NDSE Endodontics

Content

The NDSE in endodontics evaluates your knowledge and clinical competence in endodontics at the specialty level.

Blueprint

Canadian specialists in endodontics are required to have broad knowledge and skills in eleven domains. The blueprint below shows the domains and the approximate percentage of questions covered by each domain.

Endodontics Blueprint	Approximate % of questions
Biomedical sciences: a comprehensive understanding and strong foundation in the following: anatomy, physiology, oral histology, oral pathology, oral histopathology, oral microbiology, immunology, biomaterials.	15-25%
Non-surgical root canal therapy: proficiency in the procedures and materials used in non-surgical endodontic treatment, such as instrumentation, cleaning, shaping, and obturation of root canals, as well as complications and their management.	15-25%
Surgical root canal therapy: principles and techniques of micro-endodontic apical surgery and other surgical interventions related to endodontic treatment. Demonstrating expertise in the procedures and materials/grafting used in surgical endodontic treatment, including the management of complications.	5-15%
Diagnosis, treatment planning, and patient management: accurate diagnoses and developing comprehensive treatment plans while considering the individual needs of patients. Emphasizing the holistic approach to patient care and effective management.	10-20%
Pharmacology: pain management, infection control and knowledge of pharmaceutical agents and their application in endodontic practice.	6-10%
Trauma: management of dento-alveolar injuries, including splinting, post-operative care, and follow-up protocols for patients who have experienced traumatic dental injuries.	5-9%
Anesthesia: knowledge of various anesthesia techniques, local anesthetics (including composition and pharmacological properties), and pain management in endodontics; patient comfort and safety through effective anesthesia is a key focus.	4-8%
Treatment of medically compromised patient: endodontic care to patients with various medical complexities. It involves understanding and addressing the unique needs and potential challenges posed by medically compromised patients.	2-6%

Radiology: basic radiographic physics, various radiographic techniques, advanced imaging modalities like CBCT, error recognition/artifacts, and radiographic interpretation. The focus will be on the ability to interpret radiographic images accurately and utilize them effectively in diagnosis and treatment planning.	5-15%
Research methods: basics of research methodology, fundamental aspects of evidence-based endodontics, statistics, and their application in the field of endodontics.	0-4%
Miscellaneous topics (includes prosthodontics, periodontics, orthodontics, ethics, asepsis & sterilization, implantology); foundational understanding of these related areas, recognizing their potential relevance to endodontics and patient care.	2-6%
Total	100%

Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question & Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O   Azithromycin.
O   Cephalexin.
O   Clindamycin.
O Erythromycin.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE OR MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the N website.

Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A healthy 15 year old patient presents complaining of spontaneous pain in the posterior right mandible. The pain is aggravated by cold.

Photographs/Radiographs

		Tooth 4.6			Tooth 4.7		
Probing	Buccal	3	2	3	3	2	3
	Lingual	3	2	3	3	2	3
Mobility		M1			M1		
Percussion		WNL			WNL		
Palpation		WNL			WNL		
Cold Test		No response			+++ Lingering		

Knowledge of Literature Multiple-choice Questions

Some questions may test knowledge of the literature dealing mostly with results, conclusions and recommendations of various authors and associations. They may be formulated as follows: "According to [Author/reference], what is the main clinical implication of [*research*]?

NDSE Prosthodontics

Content

The NDSE in prosthodontics evaluates your knowledge and clinical competence in prosthodontics at the specialty level.

Blueprint

Canadian specialists in prosthodontics are required to have broad knowledge and skills in six domains. The blueprint below presents the six domains and the approximate percentage of questions covered by each domain.

Prosthodontics Blueprint	Approximate % of questions
Removable complete dental prosthesis	5-15%
Removable partial dental prosthesis	5-15%
Fixed dental prosthesis supported by natural teeth	15-25%
Dental implant supported prosthesis	25-35%
Maxillofacial prosthetics	2-8%
General prosthetic topics (including basic sciences, medical management of dental patients, dental management of medically compromised patients, tooth wear, theories of occlusion, materials)	20-30%
Total	100%

Format

The examination will be administered in two, three-hour parts. The examination will include a mix of single and multiple-answer multiple-choice questions, and a constructed response question that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O Azithromycin.

O Cephalexin.

O Clindamycin.

O Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.

Constructed-response questions

Sample Question

Scenario

Create a problem list for the patient in the table with each problem on a separate row (use as many or as few rows as you need). Do not list individual teeth as separate problems.

Problems
1.
2.
3.
4.
5.
6.

Additional question information

Case-based Questions

Multiple-choice questions and constructed response questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 28 year old patient presents complaining that her maxillary central incisors are not at the same height. The implant and crown replacing tooth 2.1 were placed when the patient was 16 years old.

Photographs	Radiographs	Chart

NDSE Pediatric Dentistry

Content

The NDSE in pediatric dentistry tests your knowledge and clinical competence in pediatric dentistry at the specialty level.

Blueprint

Canadian specialists in pediatric dentistry are required to have broad knowledge and skills in fourteen domains. The blueprint below presents the fourteen domains and the approximate percentage of questions covered by each domain.

Pediatric Blueprint	Approximate % of questions
Growth and development	5-11%
Cariology, preventive dentistry, and anticipatory guidance	5-15%
Restorative dentistry and oral rehabilitation	8-18%
Child development & non-pharmacological behaviour guidance	5-11%
Pharmacological behaviour guidance	5-11%
Pharmacology	2-8%
Oro-facial trauma	5-15%
Medical management	5-15%
Oral diagnosis, oral pathology, oral medicine, oral radiology	5-15%
Periodontology	0-4%
Pulp Therapy	5-15%
Infection Control and occupational hazards	0-4%
Biostatistics and epidemiology	0-4%
Record keeping and informed consent	0-4%
Total	100%

Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O Azithromycin.

O Cephalexin.

O Clindamycin.

O Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.

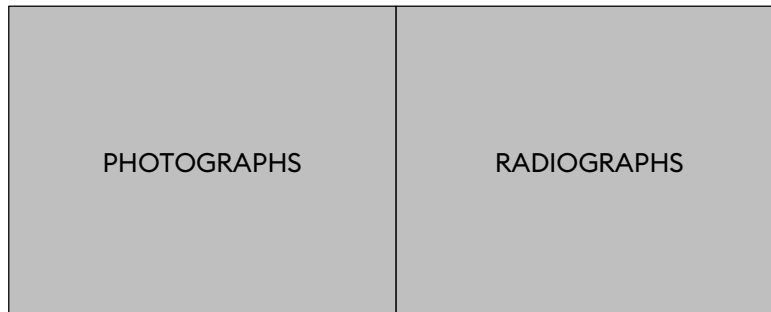Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 10 year old patient presents with a chief complaint of [*problem*].

PHOTOGRAPHS	RADIOGRAPHS

NDSE Orthodontics

Content

The NDSE in orthodontics evaluates your knowledge and clinical competence in orthodontics at the specialty level.

Blueprint

Canadian specialists in orthodontics are required to have broad knowledge and skills in seven domains. The blueprint below indicates the content domains and the approximate percentage of questions in each domain.

Orthodontics Blueprint	Approximate % of questions
Anatomy, growth, and development	12-22%
Physiology	2-8%
Patient management and treatment	35-45%
Statistics	3-9%
Biology and physical science	5-15%
Diagnosis	17-27%
Total	100%

Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O Azithromycin.
O Cephalexin.
O Clindamycin.
O Erythromycin.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An underlined example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.
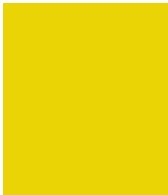
Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 15 year old patient is currently undergoing orthodontic treatment to erupt tooth 1.4.

Photographs	Radiographs	Chart

NDSE Oral and Maxillofacial Surgery

Content

The NDSE in oral and maxillofacial surgery evaluates your knowledge and clinical competence in oral and maxillofacial surgery at the specialty level.

Blueprint

Canadian specialists in oral and maxillofacial surgery are required to have broad knowledge and skills in ten domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral and Maxillofacial Surgery Blueprint	Approximate % of questions
Temporomandibular disorders	2-8%
Implants	5-15%
Cleft lip and palate, and craniofacial syndromes	2-8%
Dentoalveolar and preprosthetic surgery	5-15%
Medicine	5-15%
Pathology	5-15%
Orthognathic surgery	5-15%
Reconstructive surgery	5-15%
Trauma	10-20%
Anesthesia and sedation	10-20%
Total	**100%**

Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O Azithromycin.
O Cephalexin.
O Clindamycin.
O Erythromycin.

One or more correct answers multiple-choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers".

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.

Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 56 year old patient is referred to replace tooth 1.6 with an implant.

What is/are the most appropriate management?

Photographs	Radiographs	Chart

NDSE Oral and Maxillofacial Radiology

Content

The NDSE in oral and maxillofacial radiology evaluates your knowledge and clinical competence in oral and maxillofacial radiology at the specialty level.

Blueprint

Canadian specialists in oral and maxillofacial radiology are required to have broad knowledge and skills in five domains. The blueprint below presents the domains and the approximate percentage of the questions covered by each domain.

	Oral and Maxillofacial Radiology	Approximate % of questions
Part 1	Interpretation of diagnostic imaging of the maxillofacial region	50-60%
Part 2	Radiation sciences: Include but are not limited to radiation physics, projection geometry, the biological effect of radiation, radiation safety, dose and quality assurance.	10-15%
	Imaging techniques: Include all the imaging modalities and emerging technologies that are pertinent to Oral and Maxillofacial Radiology: -Techniques and procedures -Uses, application and limitations -Factors affecting image quality and artifact formation -Optimization of imaging techniques	5-10%
	Head and neck anatomy	10-15%
	General head and neck pathology	10-15%
Total		**100%**

Format

The examination will consist of two, three-hour parts.

Part 1 will consist of twelve sets of patient diagnostic images for you to interpret in order to write a radiographic report.

Part 2 will consist of a mix of single correct answer and multiple-answer multiple-choice questions, ordered response questions and constructed response questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question and Answer Formats-Part 1

The images may be presented in the following formats:

- CBCT volumes with Anatomage Invivo Dental Viewer.
- MDCT and MRI volumes with Sante DICOM Viewer.
- Image files.

For each of the 12 cases, you will be asked to:

- Identify the diagnostic image(s) provided, including image modality(ies) and anatomical areas depicted.
- Describe the pertinent findings on the imaging examination(s) in the format of a radiology report.
- Provide a differential or definitive interpretation of the abnormality(ies).
- You may be asked to:
- Give the etiology/pathology/cause of disease/disorder.
- Comment on the management of the case (where applicable, additional imaging, biopsy, bloodwork, other diagnostic tests that may be indicated to provide further information for patient management or treatment).

The entire case is the subject of the report.

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

What is the required increase in exposure time when the target-skin distance is doubled?

O   doubled.
O   tripled.
O   quadrupled.
O   increased 10 times.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.

Ordered response questions

Move the shells on the left by dragging them to the right in order from closest to the nucleus to furthest to the nucleus of the atom.

M
K
O

Constructed-response questions

Sample Question

What is the anatomical structure indicated by the arrow? **0.5 point**

Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

Scenario

A 63 year old female presents for evaluation of an ulcerated, firm mass in the left maxilla.

Photographs	Radiographs	Chart

NDSE Periodontics

Content

The NDSE in periodontics evaluates your knowledge and clinical competence in periodontics at the specialty level.

Blueprint

Canadian specialists in periodontics are required to have broad knowledge and skills in eleven domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Periodontics Blueprint	Approximate % of questions
Non-surgical therapy: Plaque control/behaviour modification eg. Smoking cessation; SRP; Pharmacotherapeutics eg. LAA, systemic antibiotics, host modulation therapy; Stress reduction/sedation; Occlusal therapy; Periodontal maintenance therapy	15-20%
Regeneration surgical therapy: Bone replacement grafting; Barrier therapy eg. GTR; Combination graft and barrier; Use of biologics/growth factors/dermal matrices; Soft tissue grafting/pedicle flaps/barrier or combination	15-20%
Resective surgical therapy: Gingivectomy and gingivoplasty; Open flap debridement; Osseous resective (ostectomy/osteoplasty); Root resection; Tooth extraction	15-20%
Dental implants: Site preparation; Placement; Loading protocol; Provisionalization/definitive restorations; Maintenance; Peri-implantitis/complications	25-30%
Interdisciplinary therapy: Restorative dentistry/prosthodontics consideration such as crown lengthening; Endodontics consideration; Orthodontics consideration such as canine exposure and forced eruption	10-15%
Oral/systemic interrelationships: Oral medicine/pathology/biopsy; Medicine/medically compromised; Medical emergencies	10-15%
Total	100%

Format

The examination will be administered in two, three-hour parts. The examination consists of a mix of single and multiple-answer multiple-choice questions that assess knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question & Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O Azithromycin.

O Cephalexin.

O Clindamycin.

O Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An [example of the scoring for multi-answer multiple-choice type questions](#) can be found on the NDSE website.

Additional question information

Case-based Questions

Multiple-choice questions may have an associated scenario and may contain radiographs, photographs, and charts.

Sample Case

A 35 year old smoking female is referred for a comprehensive periodontal examination and treatment with a chief complaint of bad taste in her mouth. The medical, social, and family history are non-contributory. This periodontal charting is representative of the overall periodontal status of this patient. All missing teeth were extracted due to caries.

Photographs	Radiographs	Charts

Periodontal chart

Charts for a group of teeth in a sextant or quadrant use the following chart.

		1.6			1.5			1.4			1.3			1.2		
VESTIBULAR	Furcation															
	Plaque	●			●			●	●		●					
	Recession																
	BOP	●		●			●	●		●	●		●			
	Probing	2	3	5	2	1	1	6	4	6	6	2	2	2	2	2
	Tooth	**1.6**			**1.5**			**1.4**			**1.3**			**1.2**		
LINGUAL	BOP	●		●				●	●	●	●	●				
	Probing	3	5	6	3	2	2	5	6	6	6	5	3	3	1	2
	Recession																
	Plaque	●		●				●		●	●					
	Furcation	II															
	Mobility								1			1				

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Periodontal implant chart

VESTIBULAR	Keratinized Tissue	3
	Plaque	
	Recession	
	BOP	●
	Suppuration	●
	Probing	2 2 2
	Implant	**1.5**
LINGUAL	BOP	●
	Suppuration	●
	Probing	2 2 2
	Recession	
	Plaque	●
	Keratinized Tissue	
	Mobility	-

Keratinized Tissue is measured in millimetres and denotes the finding for the vestibular (mid-buccal and/or mid-labial) surfaces of the implants.

Implant Mobility

- "-" is used to denote no mobility.
- "+" is used to

denote mobility. Bleeding

on probing is denoted by

"●" Plaque is denoted by

"●".

Suppuration is denoted by "●".

NDSE Oral Medicine and/or Oral Pathology

Content

The NDSE in oral medicine and/or oral pathology evaluates your knowledge and clinical competence at the specialty level.

Blueprint: Oral medicine only

Canadian specialists in oral medicine are required to have broad knowledge and skills in five domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral Medicine Blueprint	Approximate % examination
Basic Medical Sciences • General and systemic pathology, orofacial anatomy and physiology • Pharmacology and therapeutics • Immunology • Microbiology • General medicine	10-20%
Diseases and conditions of the maxillofacial region • Developmental conditions • Teeth abnormalities • Infection • Physical and chemical injuries • Allergies and immunologic diseases • Epithelial • Salivary glands • Soft tissue • Hematologic • Bones and joints • Odontogenic • Dermatologic • Oral manifestations of systemic diseases • Benign and malignant tumours	40-50%
Temporomandibular disorders	5-15%
Oral and dental management of patients with complex medical conditions	10-20%
Orofacial pain and neurosensory disorders	10-20%
Total	**100%**

Format: Oral medicine only

The oral medicine examination will be administered in two, three-hour parts. Part 1 and 2 will consist of a mix of single and multiple-answer multiple-choice questions, and constructed response questions that assess general knowledge, application of knowledge, diagnosis, and clinical decision-making.

Blueprint: Oral pathology only

Canadian specialists in oral pathology are required to have broad knowledge and skills in five domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral Pathology Blueprint	Approximate % examination
Microscopic examination	45-55%
Basic medical sciences • General and systemic pathology, orofacial anatomy and physiology • Pharmacology and therapeutics • Immunology • Microbiology • General medicine	10-20%
Diseases and conditions of the maxillofacial region • Developmental conditions • Teeth abnormalities • Infection • Physical and chemical injuries • Allergies and immunologic diseases • Epithelial • Salivary glands • Soft tissue • Hematologic • Bones and joints • Odontogenic • Dermatologic • Oral manifestations of systemic diseases • Benign and malignant tumours	27-37%
Laboratory pathology (including gross pathology, molecular, immunohistochemistry, tests, electron microscopy, laboratory management)	1-5%
Total	100%

The oral pathology examination will consist of two, three-hour parts.

Part 1, the microscopic evaluation, will involve the evaluation and diagnosis of tissue sections using *Leica Aperio ImageScope* pathology slide viewing software. You will be provided with a laptop on which you will find the software and case files.

You can download Leica Aperio ImageScope from http://www2.leicabiosystems.com/l/48532/2019-01-03/7bs4rg.

Cytology specimens, electron micrographs, immunohistochemical and molecular histology tissue sections may be included.

Part 2 will consist of a mix of single and multiple-answer multiple-choice questions, and constructed response questions that assess general knowledge, application of knowledge, diagnosis, and clinical decision-making.

Blueprint – Oral medicine and oral pathology

Canadian specialists in oral medicine and oral pathology are required to have broad knowledge and skills in five domains. The blueprint below indicates the content domains and approximate percentage of questions in each domain.

Oral Medicine and Oral Pathology Blueprint	Approximate % examination
Microscopic examination	45-55%
Basic medical sciences • General and systemic pathology, orofacial anatomy and physiology • Pharmacology and therapeutics • Immunology • Microbiology • General medicine	4-10%
Diseases and conditions of the maxillofacial region • Developmental conditions • Teeth abnormalities • Infection • Physical and chemical injuries • Allergies and immunologic diseases • Epithelial • Salivary glands • Soft tissue • Hematologic • Bones and joints • Odontogenic • Dermatologic • Oral manifestations of systemic diseases • Benign and malignant tumours	24-34%
Oral and dental management of patients with complex medical conditions Orofacial pain and neurosensory disorders Orofacial disorders arising from aging, systemic disease, and medical therapies	6-16%
Laboratory pathology (including gross pathology, molecular, immunohistochemistry, tests, electron microscopy, laboratory management)	1-5%
Total	**100%**

Format: Oral medicine and oral pathology

The oral medicine and oral pathology examination will be administered in two, three-hour parts.

Part 1, the microscopic evaluation, will involve the evaluation and diagnosis of tissue sections using *Leica Aperio ImageScope* pathology slide viewing software. You will be provided with a laptop on which you will find the software and case files.

You can download Leica Aperio ImageScope from http://www2.leicabiosystems.com/l/48532/2019-01-03/7bs4rg

Cytology specimens, electron micrographs, immunohistochemical and molecular histology tissue sections may be included.

Part 2 consists of a mix of single and multiple-answer multiple-choice questions, and constructed response questions that assess general knowledge, application of knowledge, diagnosis, and clinical decision-making.

Question & Answer Formats

The following samples illustrate question formats that may be found in the examination.

Single correct answer multiple-choice questions

Some questions have one correct answer, indicated by the direction "Select **ONE** correct answer."

Sample Question

Select **ONE** correct answer. **1 point**

Which antibiotic is CONTRAINDICATED for a patient with a history of a Type 1 anaphylactic reaction to penicillin?

O Azithromycin.

O Cephalexin.

O Clindamycin.

O Erythromycin.

One or more correct answers multiple choice questions

Some examination questions will have more than one correct answer. These questions are identified by the direction "Select **ONE or MORE** correct answers."

The grade you receive on each question depends on if you select all the correct answers, some of the correct answers, or an incorrect answer. All questions have a maximum score of 1 and a minimum score of 0. Every answer in a multi-answer multiple-choice question has a value. You must select all the correct answers to receive the full mark for the question. If you select an incorrect answer, it does not matter if all your other answers are correct, you receive a score of zero.

An example of the scoring for multi-answer multiple-choice type questions can be found on the NDSE website.

Constructed-response questions

Sample Question

What are 2 medications commonly used for the treatment of [*disease*]? **2 points**

1
2

Sample Question

Scenario

What is the most appropriate management? **1 point**

Sample Question

Use the table below to compare disease A and disease B. **12 points**

	Disease A	Disease B
Etiology		
Pathogenesis		
Clinical features		
Diagnosis		
Management		
Prognosis		

Additional question information

Case-based Questions

Questions may have an associated scenario and may contain radiographs, and photographs.
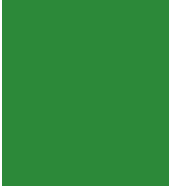
Sample case

Scenario

A 35 year old asymptomatic smoking female is referred for a red lesion in the right cheek. The lesion has been present for 2 weeks. The patient takes hydrochlorothiazide and captopril.

Photographs	Radiographs