



# Objective Structured Clinical Examination

## 2018 Protocol

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## Schedule

	Time
<b>Check-in</b>	8:00 a.m.
<b>Orientation</b>	8:30 a.m.
<b>Morning examination session</b>	9:00 a.m. to 11:30 a.m.
<b>Afternoon check-in</b>	1:00 p.m.
<b>Afternoon examination session</b>	1:30 p.m. to 4:00 p.m.

### Check-in

During check-in, candidates are issued an ID card. To receive the ID card, candidates must show current government issued photo identification such as a driver's license, passport, or military identification. The ID must be in English or French.

Photo identification:

- must show the candidate's name exactly as it appears in the candidate's online profile
- must be issued by a federal, provincial, territorial, state, or municipal authority
- must not be expired. If the photo identification does not have an expiry date, it must have been issued within the last 10 years.

Candidates who do not provide government photo identification will not be admitted.

## Format

The Objective Structured Clinical Examination (OSCE) is a station-type examination comprised of two sessions administered on the same day. Each session of the OSCE consists of 25 – 30 stations. The majority of the stations will have two questions and will require the candidate to review the information supplied (e.g. case history, dental charts, photographs, radiographs, casts, models, videos) and answer multiple response type questions. Each multiple response type question will have up to 15 answer options and one or more correct answers. Candidates will have five minutes at each station to answer the questions. After five minutes, candidates move to the next station.

Some stations may require the candidate to review the information supplied and write an acceptable prescription for a medication commonly prescribed by general dentists in Canada.

The [Question and Answer Frameworks](#) for all questions used in the OSCE are available in the Reference Materials & Resources section of the [NDEB website](#). Candidates are strongly encouraged to visit the website in preparation for the examination.

## Content

Examination items are developed based on the Competencies for a Beginning Dental Practitioner in Canada available in the [Reference Materials & Resources](#) section of the [NDEB website](#).

The blueprint below shows the content areas and approximate percentage of questions in each area.

OSCE Blueprint	Approximate % of Questions
Local Anesthesia	5%
Endodontics	7%
Medical Emergencies	5%
Oral Medicine	10%
Oral Surgery	4%
Orthodontics	7%
Pain	5%
Pediatric Dentistry	6%
Periodontics	6%
Pharmacology/Therapeutics	7%
Oral Radiology	18%
Removable Partial Dentures	4%
Single Crowns/Operative Dentistry	16%
<b>Total</b>	100%

## Sample Questions

The following are examples of the formats generally used in the OSCE.

### Case history

Many questions include a patient case history in the following format.

*Using the following information and the print of the radiograph, answer the following question on the answer sheet.*

#### **Patient Information:**

Age:	58	Blood Pressure:	120/80 mmHg
Gender:	Male	Pulse Rate:	72 bpm
Height:	180cm (5'11")	Respiration Rate:	14/min
Weight:	70kg (154lbs)	Temperature:	37°C (98.6°F)

**Chief Complaint:** "My dentures are loose."

**History of Chief Complaint:** Has noticed looseness increasing for past 2 years.

**Dental History:** Present dentures 20 years old.

#### **Medical History:**

Significant Findings:	None.
Current Medication:	None.
Allergies:	None.

#### **Social/Family History:**

Significant Findings: Smoker, ½ package/day for past 20 years.  
Alcohol consumption: 7 drinks/week.

#### **Clinical Examination:**

Significant Findings:	
Extraoral:	None.
Intraoral:	See chart.

Single correct answer

Single correct answers are identified by the direction "Select **ONE** correct answer." For single correct answer questions candidates select the most likely or most appropriate answer.

**Sample Question: 1**

(Select **ONE** correct answer.)

Orthodontic treatment (dental and/or skeletal) for this patient

- A. is not required at this time.
- B. should be initiated during the primary dentition.
- C. should be initiated during the early mixed dentition (after eruption of the first permanent molars and incisors).
- D. should be initiated during the late mixed dentition prior to the pubertal growth spurt.
- E. should be initiated immediately following the eruption of the permanent second molars.
- F. should be initiated after the completion of growth.

Answer:      A  B  C  D  E  F  G  H  I  J  K  L  M  N  O

**Sample Question: 2**

(Select **ONE** correct answer.)

Which of the following is the most likely anatomical structure/diagnosis for the radiographic entity indicated by the arrow(s)?

- A. Normal tooth.
- B. Calcifying tooth crown.
- C. Developing root apex.
- D. Hypercementosis.
- E. Attrition.
- F. Tooth fracture.
- G. Rarefying osteitis/periradicular periodontitis.
- H. Periapical osseous dysplasia (periapical cemento-osseous dysplasia).
- I. Odontoma.
- J. Dens invaginatus/dens-in-dente.
- K. Dentin dysplasia.
- L. Dentinogenesis imperfecta.
- M. Amelogenesis imperfecta.
- N. Enamel hypoplasia/Turner's tooth.
- O. Regional odontodysplasia.

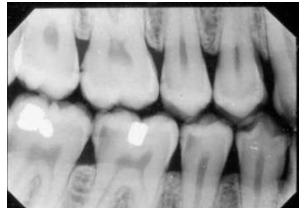
Answer:      A  B  C  D  E  F  G  H  I  J  K  L  M  N  O

One or more correct answers

Questions with one or more correct answers are indicated by the direction "Select **ONE OR MORE** correct answers." For one or more correct answer questions, candidates should select all answers that are correct. The maximum score for any question is one. The minimum score for any question is zero. Part marks will be awarded if some, but not all, correct answers are selected provided no incorrect answer is selected. Marks will be deducted for incorrect responses. Some answers are neither definitely correct nor incorrect and have been given a value of zero. Selecting one of these answers will not affect the score given to a candidate; however, if a definitely incorrect answer is selected the candidate will receive a zero score for the entire question.

**Sample Question: 3**

*Using the print of the radiograph, answer the following question on the answer sheet.*



(Select **ONE OR MORE** correct answers.)

There is radiographic evidence of caries on the

- A. distal of tooth 4.3.
- B. mesial of tooth 4.4.
- C. distal of tooth 4.4.
- D. mesial of tooth 4.5.
- E. distal of tooth 4.5.
- F. mesial of tooth 4.6.
- G. distal of tooth 4.6.
- H. mesial of tooth 4.7.
- I. distal of tooth 4.7.
- J. mesial of tooth 4.8.
- K. distal of tooth 4.8.

Answer:     A  B  C  D  E  F  G  H  I  J  K  L  M  N  O

The following is an illustration of the scoring system. The score for each answer is given to the left of each answer.

**Sample Question: 4**

(Select **ONE OR MORE** correct answers.)  
There is radiographic evidence of caries on the

Value			Value		
-1	A.	distal of tooth 2.3.	0	G.	distal of tooth 2.6.
-1	B.	mesial of tooth 2.4.	0	H.	mesial of tooth 2.7.
-1	C.	distal of tooth 2.4.	-1	I.	distal of tooth 2.7.
.3	D.	mesial of tooth 2.5.	-1	J.	mesial of tooth 2.8.
.3	E.	distal of tooth 2.5.	0	K.	distal of tooth 2.8.
.4	F.	mesial of tooth 2.6.			

Answer:  A  B  C  D  E  F  G  H  I  J  K  L  M  N  O for full mark.



Periodontal chart

The following represents an example of a periodontal chart that may be used in the OSCE. Each chart utilizes the following notation.

- The upper part of the chart denotes the findings on the vestibular (buccal and/or labial) surfaces of the teeth being discussed for the case.
- Missing teeth are denoted by a large "X."
- Probing depths, in millimetres, are listed in the next row below the tooth number.
- Recession is listed below the pocketing, in millimetres. If there is no number, there is no significant recession.
- Bleeding on probing is denoted by "•", and is listed directly below the pocket where bleeding was found.
- The middle part of the chart denotes the findings for the lingual surfaces, using the same categories as above.
- Mobility and furcation involvement apply to the entire tooth and can be found on the bottom part of the chart.
- Mobility for the tooth, if present, is listed as a "1, 2, or 3", using the Miller classification.
- The Class (I, II, III) of furcation involvement (if present) is listed with the surface indicated (B,L,M,D).

The following example is a chart of the maxillary second quadrant with tooth 2.6 missing. The probing depths, in millimeters, are listed going from mesial on the left to distal on the right. In this example, there is 3mm of recession all along the buccal of teeth 2.4 and 2.5. No other recession is noted. There is bleeding on probing on the mesiobuccal and distobuccal of teeth 2.5 and 2.7, and all along the lingual of tooth 2.7. No other bleeding is noted. Tooth 2.7 has a buccal furcation Class III and a Class 2 mobility. There is no other mobility or furcation involvement on any other teeth/surfaces.

**Vestibular**

<b>Tooth</b>	<b>2.3</b>	<b>2.4</b>	<b>2.5</b>	<b>2.6</b>	<b>2.7</b>
<b>Probing depth</b>	3 2 4	4 5 4	4 4 6	X	4 7 6
<b>Recession</b>		3 3 3	3 3 3	X	
<b>Bleeding on probing</b>			• •	X	• •

**Lingual**

<b>Tooth</b>	<b>2.3</b>	<b>2.4</b>	<b>2.5</b>	<b>2.6</b>	<b>2.7</b>
<b>Probing depth</b>	2 2 2	3 4 4	4 3 5	X	5 5 6
<b>Recession</b>				X	
<b>Bleeding on probing</b>				X	• • •

<b>Mobility</b>					2
<b>Furcation</b>					B-III

Prescription questions

- Questions requiring a written prescription will be scored from a minimum value of zero to a maximum value of four.
- A blank prescription form, illustrated below, is provided at the stations.
- Candidates must:
  - enter their ID number where indicated on the prescription form.
  - write an appropriate prescription for the patient, as described in the case history.
  - **NOT** sign the prescription.
  - deposit the completed prescription form in the drop box before leaving the station.

Station Sample

**THE NATIONAL DENTAL EXAMINING BOARD OF CANADA**  
**STATION Sample**

**Question:** **NDEB ID#** \_\_\_\_\_

Enter ID Number  
**ONLY**

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**DOCTOR XXX XXXXX**  
**100 ANYWHERE STREET**  
**ANYWHERE CITY, CANADA**

DATE: \_\_\_\_\_

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

**Rx**

NO REPEAT

REPEAT \_\_\_\_ TIME(S)

SIGNATURE XXXXXXXXXX

**(DO NOT SIGN PRESCRIPTION)**

### Grading criteria for prescriptions

A prescription submitted with no errors will receive a maximum value of 4. Deductions will be made for the following errors. Candidates will receive a zero score if:

- the candidate's NDEB ID number is incorrect or missing
- the prescription is not submitted as directed
- the prescription is signed or written in ink
- more than one prescription is submitted for the same question.

A deduction of 4 marks will be made for critical errors, including prescribing a drug which is not available in Canada.

A deduction of 1 mark will be made for each error pertaining to:

- date/patient name/structure of prescription
- drug
- dosage
- instructions

# Reference Material

## Reference Texts

A list of reference material recommended in Faculties of Dentistry in Canada can be found in the [Reference Materials & Resources](#) section of the NDEB website. The NDEB also references journal articles, clinical guidelines, and practice standards issued by specialty organizations.

## Tooth Numbering System

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

### **FDI / UNIVERSAL NUMBERING SYSTEM**

#### **PERMANENT DENTITION**

<b>FDI</b>	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>	<b>1.3</b>	<b>1.2</b>	<b>1.1</b>		<b>2.1</b>	<b>2.2</b>	<b>2.3</b>	<b>2.4</b>	<b>2.5</b>	<b>2.6</b>	<b>2.7</b>	<b>2.8</b>	<b>FDI</b>
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
<b>FDI</b>	<b>4.8</b>	<b>4.7</b>	<b>4.6</b>	<b>4.5</b>	<b>4.4</b>	<b>4.3</b>	<b>4.2</b>	<b>4.1</b>		<b>3.1</b>	<b>3.2</b>	<b>3.3</b>	<b>3.4</b>	<b>3.5</b>	<b>3.6</b>	<b>3.7</b>	<b>3.8</b>	<b>FDI</b>
						<b>RIGHT</b>									<b>LEFT</b>			

#### **PRIMARY DENTITION**

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

## Regulations

All candidates appearing for the OSCE must comply with the following regulations.

- The NDEB will provide candidates with an ID card, standard wood (No.2) pencils, block erasers, and disposable earplugs.
- Candidates are required to bring government issued photo identification.
- Candidates are only *allowed* to bring magnification or loupes without lights into the examination room.

### Prohibited Items

The following items are *not allowed* in the examination room:

- devices with recording transmitting, or receiving abilities such as radios, smart glasses, and cameras
- cell phones/smart phones
- watches
- any electronic aid or device
- dictionaries
- calculators
- mechanical pencils and erasers, highlighters, or pens
- coats, hats, wraps, and scarves (religious headwear is acceptable)
- bags of any kind including purses
- study materials
- food

*Items listed above must be placed in the area designated by the Test Administrator. The NDEB and individuals administering the examination are not responsible for lost, stolen or damaged items.*

- Candidates must be punctual for all sessions. Candidates arriving late for a session may be denied entry to the examination.
- Candidates must have the ID card visible at all times and must return the card to the Test Administrator at the end of each session.
- Candidates must read and sign the Confidentiality and Non-disclosure Agreement provided on the morning of the examination. This agreement must be signed in order to receive results. A sample Confidentiality and Non-disclosure Agreement is available in the candidate's online profile, under the "Information" tab.
- The ability of a candidate to read, interpret, and comply with instructions and other written material is part of the examination. Test Administrators and Invigilators will not answer questions involving examination content.
- All candidates must move to the next station immediately after hearing the signal.
- Candidates must stop writing at the indicated time. The transfer of answers to answer sheets must be completed within the session time. Additional time will not be allowed.

- Candidates must leave all examination materials at their final station or as directed by the Test Administrator.

### Leaving and re-entering the Examination room

- If, in an emergency, a candidate requires a washroom break, they must raise their hand and an invigilator will attempt to make arrangements while the candidate is at rest station.
- An invigilator of the same gender will accompany candidates to the washroom.
- The Test Administrator may limit the number of candidates leaving the room at the same time.
- Candidates are not permitted to bring a bag or purse into the washroom during a washroom break.
- No extra time will be given for missed stations.
- Once the examination is in progress, any candidate who leaves the examination room for any other reason will not be allowed to re-enter.

### Food and beverages

- Food is not allowed in the examination room. Candidates who require food, medicine or medical equipment in the examination room for medical reasons must submit a request pursuant to the NDEB test accommodations policy.
- Upon request, water may be provided to candidates at rest stations only. Outside beverages are not permitted.

## Misconduct

If during the administration of the examination a candidate has compromised, in any manner whatsoever, the integrity of the process or conduct of the examination, including not complying with the regulations listed above, they will be subject to the NDEB's By-laws and policies regarding Misconduct. Find information about misconduct and consequences on the NDEB website.

## 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. Read the NDEB's policies and procedures for [Test Accommodations](#) on the NDEB website.

## Compassionate Appeal

Candidates who consider themselves disadvantaged by a personal circumstance beyond their control, occurring either immediately before or during the examination, may within one week of this personal circumstance occurring request that the NDEB make a special consideration to void the results of the examination.

Compassionate Appeal requests must be submitted by email to [appeals@ndeb-bned.ca](mailto:appeals@ndeb-bned.ca). Requests should include details regarding the circumstances underlying the request, supporting documentation, and the desired outcome (e.g. void results, withdrawal from the session, refund, etc.)

Additional details regarding the submission of a Compassionate Appeal can be found in the *NDEB By-laws and Policies for Assessments and Examinations*, available on the [NDEB website](#).

## Results

The results of the OSCE will normally be released within six weeks from the date of the examination. Email notification will be sent when results are available in the candidate's online profile. Results will not be released by telephone, email, or fax.

## Passing Standard

In order to assure a consistent level of difficulty, the NDEB uses test equating and re-scaling procedures to correlate candidate raw scores to scores on a reference examination and to a standardized passing score of 75.

Candidates must obtain a minimum test equated, re-scaled score of 75 to be successful in the OSCE.

Candidates who obtain a test equated, re-scaled score of 75 or greater will receive a result of Pass.

Candidates who obtain a test equated, re-scaled score of less than 75 will receive a result of Fail and will also be given their test equated, re-scaled score.

The OSCE may contain a number of questions that are being tested. These questions may not contribute to any candidate's result.

## Manual Rescore

Within three months of the release of results, candidates can request a manual rescore of the OSCE. Two NDEB staff members perform a manual rescore by comparing the answers on the answer sheet with the master answer key. The result of the manual rescore will be the final score. In most circumstances, this process confirms that no errors occurred the scanning and electronic scoring process.

Only candidates who received a failing grade can request a manual rescore.

## Repeats

A candidate can take the OSCE a maximum of three times.