Objective Structured Clinical Examination (OSCE) Protocol
# Contents

- **Schedule** ................................................................. 4
- **Check-in** ................................................................. 4
- **Format** ........................................................................... 4
  - Sample Questions ......................................................... 5
  - Case history ..................................................................... 5
  - Single correct answer .................................................. 6
  - One or more correct answers ....................................... 6
  - Prescription questions .................................................. 7
- **Content** ........................................................................... 8
  - Terminology ..................................................................... 8
  - Blueprint ......................................................................... 8
- **Reference Materials** ...................................................... 9
  - OSCE Frameworks ......................................................... 9
  - Periodontal Charts ....................................................... 10
  - Reference Texts ............................................................ 11
  - Released Questions ...................................................... 11
  - Tooth Numbering System .............................................. 12
- **Regulations** ............................................................... 13
  - General ........................................................................... 13
- **Conduct on Examination Day** ......................................... 14
- **Misconduct** ................................................................... 15
- **Test Accommodations** .................................................... 15
- **Compassionate Appeals** ................................................ 15
- **Results** ........................................................................... 15
- **Passing Standard** .......................................................... 15
Schedule

8:00 a.m.       Check-in
8:30 a.m.       Orientation
9:00 – 11:30 a.m. Morning session
1:00 p.m.       Afternoon check-in
1:30 - 4:00 p.m. Afternoon session

Check-in

During check-in, you will be issued an NDEB ID card. To receive the NDEB ID card, you must show current government issued photo identification. Acceptable forms of government issued photo identification are:

- driver’s licence,
- passport, or
- provincial photo identification.

The identification must be in English or French.

Photo identification must show your name exactly as it appears in your online profile and must not be expired. If the photo identification does not have an expiry date, it must have been issued within the last 10 years.

If you do not provide government photo identification you will not be admitted.

Format

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

At some stations, you may be required to review the information provided and write an acceptable prescription for a medication commonly prescribed by general dentists in Canada.
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 case history and image, answer the following question on the answer sheet.*

**Patient Information:**

<table>
<thead>
<tr>
<th>Age:</th>
<th>58</th>
<th>Blood Pressure:</th>
<th>120/80 mmHg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>Male</td>
<td>Pulse Rate:</td>
<td>72 bpm</td>
</tr>
<tr>
<td>Height:</td>
<td>180 cm</td>
<td>Respiration Rate:</td>
<td>14/min</td>
</tr>
<tr>
<td>Weight:</td>
<td>70 kg</td>
<td>Temperature:</td>
<td>37°C</td>
</tr>
</tbody>
</table>

**Chief Complaint:**

“My dentures are loose.”

**History of Chief Complaint:**

Increasing looseness over 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 20 years.
  Alcohol consumption: 7 drinks/week.

**Clinical Examination:**

- Significant Findings:
  - Extraoral: None.
  - Intraoral: See chart.
Single correct answer

Questions with a single correct answer are identified by the direction “Select ONE correct answer”. For these questions, you should 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

One or more correct answers

For questions that have one or more correct answers, indicated by the direction “Select ONE OR MORE correct answers”, select all answers that are correct. The minimum score for any question is zero (“0”). The maximum score for any question is one (“1”). Answers may have different weights. Part marks will be awarded if some, but not all correct answers are selected, provided that no incorrect answer is selected. If an incorrect answer is selected, the participant will receive a zero (“0”) score for the entire question.

Sample Question: 2
(Select ONE OR MORE correct answers.)
There is radiographic evidence of caries on the

<table>
<thead>
<tr>
<th>Value</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>A.</td>
</tr>
<tr>
<td>-1</td>
<td>B.</td>
</tr>
<tr>
<td>-1</td>
<td>C.</td>
</tr>
<tr>
<td>.3</td>
<td>D.</td>
</tr>
<tr>
<td>.3</td>
<td>E.</td>
</tr>
<tr>
<td>.4</td>
<td>F.</td>
</tr>
</tbody>
</table>

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

- Questions requiring a written prescription will be scored from a minimum value of zero to a maximum value of four marks.
- A blank prescription form, illustrated below, is provided at the stations.
- You must:
  - enter your NDEB 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# _____________

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 four marks. You will receive a zero score if:

- your 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 four marks will be made for critical errors, including prescribing a drug which is not available in Canada.

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

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

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.

Terminology

Examination questions are updated on a regular basis as new knowledge becomes available.

The NDEB is aware that the American Academy of Periodontology (AAP) published a new disease classification in the Journal of Periodontology in June 2018. All NDEB examinations and assessments will use the previous AAP classification (1999).

The NDEB will notify examinees when the new disease classification is incorporated into its examinations and assessments.

Blueprint

The blueprint below shows the content areas and approximate percentage of questions in each area.
<table>
<thead>
<tr>
<th>OSCE Blueprint</th>
<th>Approximate % of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Anesthesia</td>
<td>5</td>
</tr>
<tr>
<td>Endodontics</td>
<td>7</td>
</tr>
<tr>
<td>Medical Emergencies</td>
<td>5</td>
</tr>
<tr>
<td>Oral Medicine</td>
<td>10</td>
</tr>
<tr>
<td>Oral Surgery</td>
<td>4</td>
</tr>
<tr>
<td>Orthodontics</td>
<td>7</td>
</tr>
<tr>
<td>Pain</td>
<td>5</td>
</tr>
<tr>
<td>Pediatric Dentistry</td>
<td>6</td>
</tr>
<tr>
<td>Periodontics</td>
<td>6</td>
</tr>
<tr>
<td>Pharmacology/Therapeutics</td>
<td>7</td>
</tr>
<tr>
<td>Oral Radiology</td>
<td>18</td>
</tr>
<tr>
<td>Removable Partial Dentures</td>
<td>4</td>
</tr>
<tr>
<td>Single Crowns/Operative Dentistry</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Reference Materials

**OSCE Frameworks**

The Question and Answer Frameworks for all questions used in the OSCE are available in the Reference Materials & Resources section of the NDEB website. You are strongly encouraged to visit the website in preparation for the examination.
Periodontal Charts

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 3 mm 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**

<table>
<thead>
<tr>
<th>Tooth</th>
<th>2.3</th>
<th>2.4</th>
<th>2.5</th>
<th>2.6</th>
<th>2.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probing depth</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Recession</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Bleeding on probing</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

**Lingual**

<table>
<thead>
<tr>
<th>Tooth</th>
<th>2.3</th>
<th>2.4</th>
<th>2.5</th>
<th>2.6</th>
<th>2.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probing depth</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Recession</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Bleeding on probing</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

**Mobility**

2

**Furcation**

B-III

**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.

**Released Questions**

The NDEB publishes a large volume of released questions which are available in the Reference Material and Resources section of the NDEB website.
Tooth Numbering System

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

### FDI / UNIVERSAL NUMBERING SYSTEM

#### PERMANENT DENTITION

<table>
<thead>
<tr>
<th>FDI</th>
<th>Universal</th>
<th>FDI</th>
<th>Universal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8</td>
<td>1</td>
<td>2.2</td>
<td>10</td>
</tr>
<tr>
<td>1.7</td>
<td>2</td>
<td>2.3</td>
<td>11</td>
</tr>
<tr>
<td>1.6</td>
<td>3</td>
<td>2.4</td>
<td>12</td>
</tr>
<tr>
<td>1.5</td>
<td>4</td>
<td>2.5</td>
<td>13</td>
</tr>
<tr>
<td>1.4</td>
<td>5</td>
<td>2.6</td>
<td>14</td>
</tr>
<tr>
<td>1.3</td>
<td>6</td>
<td>2.7</td>
<td>15</td>
</tr>
<tr>
<td>1.2</td>
<td>7</td>
<td>2.8</td>
<td>16</td>
</tr>
<tr>
<td>1.1</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### PRIMARY DENTITION

<table>
<thead>
<tr>
<th>FDI</th>
<th>Universal</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5</td>
<td>A</td>
</tr>
<tr>
<td>5.4</td>
<td>B</td>
</tr>
<tr>
<td>5.3</td>
<td>C</td>
</tr>
<tr>
<td>5.2</td>
<td>D</td>
</tr>
<tr>
<td>5.1</td>
<td>E</td>
</tr>
<tr>
<td>6.1</td>
<td>F</td>
</tr>
<tr>
<td>6.2</td>
<td>G</td>
</tr>
<tr>
<td>6.3</td>
<td>H</td>
</tr>
<tr>
<td>6.4</td>
<td>I</td>
</tr>
<tr>
<td>6.5</td>
<td>J</td>
</tr>
<tr>
<td>T</td>
<td>O</td>
</tr>
<tr>
<td>S</td>
<td>N</td>
</tr>
<tr>
<td>R</td>
<td>M</td>
</tr>
<tr>
<td>Q</td>
<td>L</td>
</tr>
<tr>
<td>P</td>
<td>K</td>
</tr>
<tr>
<td>8.5</td>
<td>FDI</td>
</tr>
<tr>
<td>8.4</td>
<td>RIGHT</td>
</tr>
<tr>
<td>8.3</td>
<td>LEFT</td>
</tr>
<tr>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>8.1</td>
<td></td>
</tr>
</tbody>
</table>
Regulations

General

- You must be punctual for all sessions. If you arrive late you may be denied entry to the examination.
- You cannot bring watches and/or devices with recording or transmitting/receiving abilities into the examination room.
- Outerwear of any kind is not permitted in the examination room.
- You must empty all pockets before entering or leaving the examination room.
- You must read and sign a Confidentiality and Non-disclosure Agreement provided on the morning of the examination. This agreement must be signed to receive results. A sample Confidentiality and Non-disclosure Agreement is available in your online profile, under the “Information” tab. We recommend you review it prior to the examination. NDEB examination content is confidential. All questions are property of the NDEB. Unauthorized disclosure of examination questions is prohibited under copyright laws. By signing the Confidentiality and Non-disclosure Agreement you agree to maintain the confidentiality of NDEB questions.
- Only water, in a see-through, plastic bottle, with paper labels removed, is allowed in the examination room. For the OSCE, water will be provided by the staff.
- Food is not allowed in the examination room. If you require food, medicine, or medical equipment in the examination room you must submit a request pursuant to the NDEB test accommodations policy.
- You are allowed to have magnification for examinations that contain images. Magnification with lights will not be allowed.
- You can use the washroom facilities during an examination. If you use the washroom during the examination, an invigilator will accompany you. No extra time is given for washroom breaks.
- You are not permitted to bring any items, including a bag or purse into the washroom.
- Once the examination is in progress, if you leave the examination room for any reason, other than to use the washroom facilities, you will not be allowed to re-enter.
- You will not be allowed to leave the examination room when there are 10 minutes remaining.
Conduct on Examination Day

Before entering the examination room:

- Remove all outerwear, including hats, scarves, and jackets.
- Empty all pockets.
- Remove all large jewelry and watches and place in your bag or jacket.
- Turn off your cell phone and place it in your bag or jacket.
- Use the washroom.

When entering the examination room:

- Place all personal items in the area designated by the Test Administrator. The NDEB and individuals administering the examination are not responsible for lost, stolen, or damaged items.
- Locate your seat.
- Place your NDEB ID card on your desk. This must be visible at all times.
- Do not talk to other examinees.

During the examination:

- You must not communicate, or attempt to communicate, with other examinees.
- You must not write on anything except the materials provided by the NDEB.
- If you need to use the washroom, raise your hand and wait for the invigilator to escort you.

At the end of the examination:

- You must stop writing when the Test Administrator indicates time is up. The transfer of answers from books to answer sheets must be completed within the session time.
- Remain in your seat until all your examination material is collected.
- You must not attempt to recreate questions or share specific test items with examinees, potential examinees, or study groups.
Misconduct

You must maintain the confidentiality of all NDEB content. You cannot discuss your examination with others or communicate about questions or answers before, during or after an examination.

If at any time you are suspected of compromising the security of the examination, including not complying with the regulations, you will be subject to the NDEB’s By-laws regarding misconduct. Additional information on misconduct can be found 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 Appeals

Compassionate appeals must be submitted in writing within seven days of the examination to appeals@ndeb-bned.ca.

Information regarding Compassionate Appeals can be found on the NDEB website and in the NDEB By-laws.

Results

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

Results will be reported as a Pass/Fail. Those who receive less than 75 will also receive their test equated re-scaled score.

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

Passing Standard

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

You must obtain a minimum test equated, re-scaled score of 75 to be successful on an NDEB examination.
Manual Rescore

The appeal process for written style examinations is a manual rescore.

If you have received a failing grade on an examination, you have one month from the date results are released to request a manual rescore of your examination.

A manual rescore involves two NDEB staff members comparing the answers on your 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 during the scanning and electronic scoring process.

Repeats

Each of the NDEB’s examinations and assessments can be taken three times, except for the DSCKE which can be taken twice.