

## Quality Assurance Written Assessment (QA Test)

After confirming your Path option in the SMILE Portal, the QA Test can be requested in Step 4 of the dashboard. It takes about one to two hours for the request to process and then the link to complete the test appears in the Self-Service Portal (under the Quality Assurance heading). Please note, you cannot change your Path option after the first test attempt.

You have three attempts to complete the QA Test. You won't receive a final score or percentage after completing the test, but you will receive an overall exam result (successful or unsuccessful). Additional feedback will include whether the standard was met or not in each of the competency areas. This information can be used to help identify areas of strength and improvement if you need to prepare for another attempt. The feedback should also be used to help identify areas to explore when setting any future continuing education goals and activities. Being unsuccessful in a specific competency does not necessarily indicate that you will be unsuccessful on the QA Test overall. **Notification of incorrect answers at the completion of the test will not be provided.**

### ABOUT THE QA TEST

The QA Test is a 100-question multiple-choice, open-book test and is available in English or French. You will have two and a half hours to complete the test. Based on accepted examination guidelines, a reasonable question/time ratio is one minute per question. It is designed to ensure that you have sufficient knowledge of Dental Hygiene theory and practice by asking you to answer questions on knowledge (20%-30%), application (45%-55%) and critical thinking (20%-30%). Each question stem refers to only one question and will have three or four multiple-choice options associated with it. There will not be any case studies that require you to answer multiple questions.

While the QA Test is 100 questions, only 90 questions are scored. The QA Test contains 10 experimental questions that are being assessed for future use. Answers to these experimental questions will not count toward the final score.

Everyone taking the QA Test will have different questions on their test, so the passing score for any given test will be unique to the combination of questions that appear on that particular test. For example, a test that has a combination of more difficult questions will not have a passing score as high as a test that has a combination of easier questions on it. The questions that appear on any test will be completely randomized but will match the blueprint for the competencies and type of question.

## QA TEST BLUEPRINT

<b>Competencies</b>	<b>Percent Of Exam</b>	<b>Knowledge Questions Per Test (20%-30%)</b>	<b>Application Questions Per Test (45%-55%)</b>	<b>Critical Thinking Questions Per Test (20%-30%)</b>
Community Health	5	1-2	2-3	1-2
Emergency Protocols	7	1-2	3-4	1-2
Health and Safety/WHMIS	5	1-2	2-3	1-2
Infection Prevention and Control	22	5-7	10-13	5-7
Pharmacology	7	1-2	3-4	1-2
Process of Care	20	4-6	9-11	4-6
Professionalism/Communication	7	1-2	3-4	1-2
Radiography (Exposure and Interpretation)	5	1-2	2-3	1-2
Special Needs/Medically Compromised	7	1-2	3-4	1-2
Jurisprudence/Ethics/Record Keeping	15	3-5	6-9	3-5
<b>Totals</b>	<b>100</b>	<b>20-30</b>	<b>45-55</b>	<b>20-30</b>

## HOW TO PREPARE

The questions are based on the knowledge, skills and judgment needed to practise Dental Hygiene competently. The following may be useful in preparing:

- Any current Dental Hygiene textbook and/or dental hygiene review book
- CDHO Registrants' Handbook
- CDHO's Jurisprudence Education Module
- CDHO's Drugs in Dental Hygiene practice course
- CDHO's Knowledge Network
- CDHO's Practice Standards and Guidelines
- CDHO's Legislation and Bylaws
- Dental Drug Reference

## QUALITY ASSURANCE WRITTEN ASSESSMENT (QA TEST)

**Please note:** The QA Test may include questions about the administration of local anaesthetic. Although this may not have been taught in Ontario when many RDHs who are currently practising graduated, it is now included as part of the curriculum in Ontario Dental Hygiene schools.

### BEFORE TAKING THE QA TEST

Before taking the QA Test, RDHs will be required to acknowledge that they have carefully read and understand the following information.

- All scores/results are subject to examination by an external and specialized examination security company who may use data forensics to identify individuals who have QA Test results that could be deemed unreliable or invalid, or where any form of irregular behaviour could be suspected.
- Cheating on the QA Test is a serious offence and is subject to disciplinary action. Any evidence of cheating that occurs during the QA Test may be referred to the Inquiries, Complaints and Reports Committee (ICRC) as this may be considered professional misconduct. Any individual who knows or becomes aware that an RDH may have cheated or failed to follow the QA Test rules in any way must notify the Manager, Quality Assurance immediately. Some examples of cheating/ professional misconduct include:
  - Any recording of the QA Test screen, including taking screenshots, pictures or video;
  - Copying, disclosing or disseminating the QA Test questions or answers to anyone before, during or after the QA Test;
  - Allowing other individuals to assist on the QA Test;
  - Taking the QA Test together with another RDH;
  - Calling CDHO before, during or after the QA Test to seek answers to any questions from the test.
- The QA Test must be completed in one sitting and submitted within the 2 ½ hours allotted before the online test timer expires.

## SAMPLE TEST QUESTIONS

1. **What type of correlational relationship would the following statement indicate? *Research has shown that the caries rate decreases as the consumption of fluoridated water increases.***  
(Community Health – Knowledge)
  - A. Inverse
  - B. Positive
  - C. Strong
  - D. Weak
  
2. Which of the following would be best to address the headache associated with the abrupt withdrawal from nitrous oxide conscious sedation? (Pharmacology – Application)
  - A. Oxygen
  - B. Ibuprofen
  - C. Acetaminophen
  - D. Aspirin®
  
3. **Bill, 45 years old, presents to the dental office for dental hygiene care. His medical history reveals he is being treated for tinea pedis. During the assessment, the dental hygienist finds generalized marginal inflammation, generalized moderate subgingival calculus deposits, and generalized bleeding on probing, with 4 mm probing depths in the posterior regions. Radiographs reveal no indication of bone loss. Which of the following conditions represents the most accurate clinical diagnosis of Bill’s periodontal status?** (Process of Care – Critical Thinking)
  - A. Stage I Grade A
  - B. Stage II Grade A
  - C. Plaque-induced Gingivitis
  - D. Non-plaque induced Gingivitis
  
4. **Where is 90% of chlorhexidine gluconate 0.12% excreted?** (Pharmacology – Knowledge)
  - A. Feces
  - B. Urine
  - C. Liver
  - D. Small intestine
  
5. **A 30-year-old man is diagnosed with neurological symptoms indicative of Creutzfeldt-Jakob disease. The dental hygienist wants to ensure that all the instruments used on this client are sterilized properly. What is the safest way for the dental hygienist to reprocess their instruments?**  
(Infection Control – Critical Thinking)
  - A. Routine practices for reprocessing are adequate since all clients are treated as potentially being infectious.
  - B. The instruments should be placed in glutaraldehyde cold-soak solution overnight and then sterilized, ensuring that the sterilizer reaches the maximum 134 degrees Celsius.
  - C. A biological indicator and a Type 5 chemical indicator strip should be put in the package with the instruments.
  - D. The instruments should not be reprocessed and should be discarded.

## ANSWERS AND RATIONALES

1. The correct answer is A. An inverse relationship exists when the variables vary in opposite directions, so as one variable increases in value, the other decreases and vice versa.
2. The correct answer is A. If 100% oxygen is not breathed for a full 5 minutes at the end of the procedure, a headache may occur. While answers B, C and D may all offer headache relief, they are not the best option. The best answer is oxygen.
3. The correct answer is C. Absence of bone loss would indicate that the diagnosis would be gingivitis. Since tinea pedis is not a systemic disease, the answer would be plaque-induced gingivitis.
4. The correct answer is A. 90% of Chlorhexidine excretion takes place in the feces with 1% in the urine. This information can be found in a dental drug reference.
5. The correct answer is D. Creutzfeldt-Jakob disease is a rapidly progressive, invariably fatal neurodegenerative disorder believed to be caused by an abnormal isoform of a cellular glycoprotein known as the prion protein. Prions are infectious proteins, lack RNA or DNA, and are incredibly resistant to sterilization. Destruction of heat-resistant surgical instruments that come in contact with high infectivity tissues is the safest and most unambiguous method.

## APPENDIX 1: DEVELOPING THE QA TEST

CDHO worked with an external psychometrician to develop the QA Test.

Competency categories were determined based on areas of remediation historically ordered by the QA Committee for those who were not successful in QA assessments. Subject matter experts (SMEs) were then surveyed and asked to assign a percentage for each of the 10 competency categories. Data was collected and discussion was held with all SMEs about percentages assigned by all topic areas.

A large pool of test questions was then developed and 54 RDHs tested the questions in a field test. Participants were asked to answer the questions and were then divided into four groups to provide feedback on content, ambiguity, complexity and comprehensiveness. The psychometrician then determined the P-value (percentage of candidates answering the question correctly) and the discrimination (a correlation between how well a candidate performs on the individual question against the candidate's overall performance on the test). Questions that didn't meet performance standards were eliminated, and will be edited and re-tested in the future.

The next step involved setting a passing grade by using the Modified Angoff method. SMEs, working with the psychometrician, set the specific pass score for each question on the QA Test. Using this method, the overall pass score is set in direct reference to the difficulty of the questions themselves.

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