Study Guide

International Licensing Examination for Hearing Healthcare Professionals

Prepared by:

International Hearing Society
Dear Candidate,

Welcome to the hearing healthcare profession!

This purpose of this Study Guide is to help you prepare for the International Licensing Examination for Hearing Healthcare Professionals (the written licensing examination.) It contains important information related to the administration of the examination. As you may know, the examination is used for purposes of licensing and is administered by the International Hearing Society (IHS) on behalf of your state/provincial licensing board.

STOP!

If you will take the examination on or after May 1, 2016, please read the important notification on page 23. Candidates who take the examination in May and early June 2016 should expect a delay in the reporting of exam results until mid-June. For examinations given after mid-June, score reporting will return to its current schedule.

Please read the Study Guide carefully, and follow the instructions given. In addition to the pertinent information about what to expect before, during, and after the examination, the Study Guide also provides you with a list of recommended reference materials and sample test questions that you may find useful.

To give you a brief overview, the examination is comprised of one hundred and five (105) multiple-choice questions. You will receive a score based on eighty (80) scored items. Dichotomous scoring is used for grading the examination, which means the answer options are either right or wrong. You will earn one (1) point for right answers and earn zero (0) points for wrong answers. Please note that there are a few questions on the exam that request selection of two (2) answers. You must select two (2) answer options correctly in order to earn (1) one point for that question. For more information, please continue reading this Study Guide.

Should you have any questions, please contact your licensing board or IHS. We wish you the very best in your journey to become a hearing healthcare professional.

Sincerely,

International Hearing Society
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Introduction

About the International Hearing Society (IHS)

The International Hearing Society (IHS) is a membership association that represents hearing healthcare professionals worldwide. IHS members are engaged in the practice of testing human hearing and selecting, fitting and dispensing hearing instruments and counseling patients. Founded in 1951, the Society continues to recognize the need for promoting and maintaining the highest possible standards for its members in the best interests of the hearing impaired it serves.

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Follow us on Twitter®
@ihsinfo

About the Study Guide

The purpose of this study guide is to help you, the “candidate”, prepare for the International Licensing Examination for Hearing Healthcare Professionals (“examination”).¹ Use this opportunity to become familiar with some of the various question formats utilized on the examination.

The study guide is not intended to represent the entire body of knowledge, nor does it present all possible types of questions and item styles that may appear in the examination. It is, however, a sample of typical items and item styles used in the exam. Candidates are strongly advised to become familiar with these multiple-choice item-styles, and to use the guide to begin to learn how to handle this type of exam format.

This study guide does not provide the actual test questions contained in the examination, but familiarizes you with the different question types and competency areas that will be tested. The questions are representative of the style and content of the questions used on the current International Licensing Examination for Hearing Healthcare Professionals and are based on the current body of knowledge.

¹ Please note: Use of this guide and/or the IHS Distance Learning for Professionals in Hearing Health Sciences course does not assure you a passing score on the examination.
About the Licensing Examination

The International Licensing Examination for Hearing Healthcare Professionals is a proprietary examination which is owned and copyrighted by the International Hearing Society.

This examination is intended to provide one of many tools needed in a licensing process. It assists the state/provincial licensing board in their responsibility to identify entry-level professionals whose knowledge and clinical skills meet or exceed basic expected professional standards.

The examination is practice-based, meaning that you will be expected to understand and apply, analyze and evaluate experiences in your everyday professional work.

You will be required to:
- Transfer knowledge
- Show comprehension of material and processes
- Demonstrate standard processes
- Explain concepts or ideas
- Determine an answer based on your ability to implement a process or steps of a process, make something function, or change a working system
- Critically think and demonstrate reasoning ability
- Integrate new or given information with known information or processes
- Make decisions or provide judgments

Each examination question will provide a scenario or information to consider and apply knowledge of processes, relationships, etc., to solve a problem or devise a solution in the given situation. Examination questions are drawn from, and referenced to the recommended reference materials in this study guide.

Description of a Successful Candidate

The successful candidate is knowledgeable of, and capable of, safely performing within the scope of practice permitted by the governing agency’s license. Within the permitted scope of practice, he/she is independently capable of determining and understanding a patient’s/client’s hearing and listening needs; discovering a patient’s/client’s health history; determining, conducting, and interpreting appropriate audiometric tests; selecting and fitting appropriate instrumentation and other assistive devices; performing proper sanitation; recognizing when referrals to other health care professionals – including more experienced hearing aid specialists – are necessary, and working, when necessary, with associated healthcare professionals to help a patient/client fully understand their particular issues related to hearing and hearing loss.

The candidate must be supervised in accordance with the laws and rules of the governing agency where he/she intends to practice.
Examination Composition

This examination was developed by practicing professionals in the field of hearing instrument sciences. These individuals volunteered their time and expertise to this project under the guidance of a test development and psychometric services company.

During the development stages of this examination, a job-task analysis survey was distributed to hearing dispensing professionals. From the survey data, a competency model (exam blueprint) was developed.

The examination consists of one hundred and five (105) multiple-choice questions (also known as “items”). Questions from each competency area are included in the examination form. This requires candidates to answer questions from each of the competency areas. Please refer to the competency model (body of knowledge) included in this study guide.

Preparing for the Examination

In most jurisdictions, you will be expected to have a certain level of proficiency in order to pass a competency exam. It has been demonstrated that you can gain the necessary knowledge and experience to become a successful hearing aid specialist by participating in an active practice/clinic in conjunction with your studies.

Your local licensing board utilizes the International Licensing Examination for Hearing Healthcare Professionals from the International Hearing Society. Examination questions will change over time. All examination questions have been evaluated for appropriateness.

It is highly suggested that you purchase IHS’ Distance Learning for Professionals in Hearing Health Sciences course – the whole course package! It is a self-paced, independent, self-study course. It is specifically designed as an introduction to the profession. The Distance Learning course and other reference materials are an excellent source of information for candidates to study and prepare for this licensing examination. To order the course, visit www.ihsinfo.org/dlonline.

IHS’ newest training tool, the Trainer Manual, is designed to provide a step-by-step plan for trainers/sponsors to lead their apprentices through the Distance Learning course in preparation for the written licensing examination. This initiative was launched to standardize the training of apprentices. The new Trainer Manual is a roadmap for teaching and learning the knowledge and skills necessary for safe and successful entry-level practice. To order, visit www.ihsinfo.org/trainermanual.

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2 Please note: Use of this guide and/or the IHS Distance Learning for Professionals in Hearing Health Sciences course does not assure you a passing score on the Examination.
Use this Study Guide, recommended reading materials, and hands-on experience you’ve gained, with an eye toward **career focus** rather than **exam focus**. Hearing instrument dispensing is a wonderful profession in which you can enhance the lives of many, many people, as well as your own.

Finally, please share this study guide with your mentor or sponsor.
Before the Examination

Non-Discrimination

No candidate shall be denied the ability to sit for the licensing examination because of age, sex/gender, sexual preferences, marital status, religious preference, nationality, race or physical disability.

Accommodation Requests

IHS is committed to complying with the Americans with Disabilities Act of 1990 (“ADA”). To request accommodations, a candidate may contact IHS to obtain a “Candidate Accommodation Request Form”. A candidate must submit the complete request form along with the required supporting documentation prior to scheduling an examination appointment.

IHS will conduct an individualized assessment of each request for accommodations based upon the documentation submitted by the candidate in accordance with the Candidate Accommodation Request Form requirements. The accommodation assessment period is typically sixty (60) days. IHS will then notify the candidate whether his/her accommodation request has been approved or denied. The candidate then may schedule and pay for his/her examination appointment.

Under the ADA, IHS is not required to provide accommodations that would fundamentally alter what the examination is intended to test, jeopardize examination security, or result in an undue burden.

To download a Candidate Accommodation Request Form, please visit the “About the Exam” page at www.webassessor.com/ihs.

Creating a Test-Taker Account

The International Hearing Society (IHS) is the administrator of the written licensing examination. Kryterion is the delivery service provider. Webassessor™ is the online system that you will access to schedule your examination appointment.

The state/provincial licensing board determines candidate eligibility to take the examination. Following the licensing board’s determination of the candidate’s eligibility and notification to IHS, the candidate will receive an email message from IHS with instructions on creating a Webassessor™ test-taker account, which enables the candidate to schedule and pay for his/her examination appointment. Also attached to this introduction email message is this study guide.

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3 Please note that the submission of incomplete Accommodation Request Forms and/or incomplete supporting documentation may delay the assessment process.
Follow these simple steps to create account:

1. Access the Webassessor™ system using the following link www.webassessor.com/ihs

2. Create an account by clicking the “Create New Account” link in the upper right-hand corner of the web page and by completing the online form.

3. 3 business days after you’ve created an account, login to schedule an examination date, time and location.

www.webassessor.com/ihs

After the candidate creates his/her test-taker account, the candidate will receive a “Welcome to Webassessor™” email message containing his/her personal login and password.

It is important to note that the candidate’s test-taker account must be verified by IHS before the candidate may schedule an examination appointment. The verification period is approximately 3 business days (72 hours) from the time the candidate creates his/her test-taker account in Webassessor™. IHS will verify that the pre-requisites have been met in order to proceed. After 72 hours (3 business days) after the account is created, the candidate should login to schedule an examination appointment. The candidate chooses the date, time and location. Please note, the candidate will not receive another notification to do so.
Scheduling an Examination Appointment

Following the candidate’s creation of his/her test-taker account, and the seventy-two (72) hour verification period, the candidate may login to his/her Webassessor™ account to schedule an examination appointment. The candidate will select a testing center, and an examination date and time. Upon check-out, the candidate must pay the examination fee of $225.00 (USD).

The examination fee of $225.00 (USD) must be paid each time a candidate schedules an appointment to take the examination, including re-takes. The fee is paid at the time of scheduling by Visa®, MasterCard®, or American Express®. The charge will appear as “KRYTERION*TESTASSESMT” on your credit card statement. The candidate will receive an individual “Authorization Code” in an email message following the Webassessor™ scheduling process.

Follow these simple steps to schedule an exam appointment:

1. LOG-IN: After the seventy-two (72) hour verification period, candidate logs into his/her account in www.webassessor.com/ihs to schedule the examination.
SCHEDULE AN EXAM: Candidate clicks on “Schedule An Exam” tab at the top of the screen. Choose the *International Licensing Examination for Hearing Healthcare Professionals* by clicking on the “Add to Cart” button on the right-hand side.

2. SELECT A TESTING CENTER: Candidate chooses the Province/State from the dropdown menu. Then clicks on the “Search” button. A list of testing centers will appear.

*NOTE, IF DESIRED LOCATIONS ARE NOT AVAILABLE, EXPAND THE SEARCH BY USING THE POSTAL CODE OR OTHER PARAMETERS FOR FINDING TESTING CENTERS.*

*Please note: You may choose to take the exam at a testing center in a neighboring state or province, which may be more convenient for you.*
3. CHOOSE A DATE AND TIME: Based on the chosen testing center, a calendar of availability will display. This is the real-time availability of that particular testing center. Only the days and times that the chosen testing center is open/available are shown. The candidate clicks on the day and time he/she desires. The candidate must agree to the acknowledgement at the bottom of the screen. Then, click “Select”.

Please note: If the displayed dates and times are not convenient for you, you may search the availability of a different testing center. Click the back arrow to return to the previous screen.
4. **PAY FOR THE EXAM:** At check-out, the candidate will pay for the examination. The fee for the exam is $225.00 per examination. A candidate is not scheduled to take the examination until he/she checks out and pays.

The examination fee of $225.00 must be paid each time a candidate schedules an appointment to take the examination, including re-takes. The fee is paid at the time of scheduling by Visa®, MasterCard®, or American Express®. The charge will appear as “KRYTERION*TESTASSESMNT” on the credit card statement.

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For Technical Assistance with Webassessor™ or the Testing Centers Network, contact:

Kryterion, Inc.
800.403.6199
ktnsupport@KryterionOnline.com
Rescheduling an Exam Appointment

Please note the following parameters regarding rescheduling an exam:

- A candidate may reschedule his/her examination appointment more than 72 hours (exactly) before the appointment time at no charge.
- A candidate may reschedule his/her examination appointment 3 to 1 business days (24-72 hours) before the appointment time by contacting IHS and submitting an additional $75.00 rescheduling fee.
- A candidate may not reschedule his/her examination appointment on the examination date (Less than 24 hours). This is considered a no-show, and the candidate forfeits their examination fee.

Follow these steps to reschedule an exam appointment:

1. Login to Webassessor™.
2. Click the Details link.
3. Click the Reschedule button in the lower right corner.
4. SELECT A TESTING CENTER: Candidate chooses the Province/State from the dropdown menu. Then clicks on the “Search” button. A list of testing centers will appear.

5. CHOOSE A DATE AND TIME: Based on the chosen testing center, a calendar of availability will display. This is the real-time availability of that particular testing center. Only the days and times that the chosen testing center is open/available are shown. The candidate clicks on the day and time he/she desires. The candidate must agree to the acknowledgement at the bottom of the screen. Then, click “Select”.

Note: If desired locations are not available, expand the search by using the postal code or other parameters for finding testing centers.
Rescheduling an Exam Appointment (within 72 hours)

Please note if you are rescheduling your exam and you are within 72 hours of your originally scheduled exam time, you will incur a $75 fee. The following screen will appear and you will be required to enter your credit card information before continuing.

For Technical Assistance with Webassessor™ or the Testing Centers Network, contact:

Kryterion, Inc.
800.403.6199
ktnsupport@KryterionOnline.com
Cancellations: Cancelling an Exam Appointment

1. A candidate may cancel his/her examination appointment for a full refund of $225.00 (USD) if the candidate makes the cancellation through his/her user account on Webassessor™ more than 72 hours before the appointment time.

2. A candidate may cancel his/her examination appointment for a partial refund if the candidate makes the cancellation within 72 hours prior to the appointment time. The candidate must contact IHS to make the cancellation and to receive a partial refund of $150.00 (USD).

3. A candidate may not cancel his/her examination appointment on the examination date. This is considered a no-show and the candidate forfeits their examination fee.

Cancelling an Exam Appointment (with 72 hours)

Please note if you are cancelling your exam and you are within 72 hours of your originally scheduled exam time, you will incur a $75 fee. The following screen will appear advising that your refund for the exam will be less the $75 cancellation fee.
No-Shows

A candidate who fails to appear for his/her scheduled examination appointment will not receive a refund. A no-show candidate may access his/her Webassessor™ account to re-schedule an examination appointment and pay the $225.00 (USD) examination fee again.

For Technical Assistance with Webassessor™ or the Testing Centers Network, contact:

Kryterion, Inc.
800.403.6199
ktnsupport@KryterionOnline.com
Taking the Examination

Identification & Authorization Code

In order to be admitted to the testing center, the candidate must bring the following three (3) items with them to the testing center for their examination appointment. There will be no exceptions.

1. **Photo identification**: and
   - Acceptable photo identification: A government-issued identification card or driver’s license, passport, or military identification.

2. **Second form of identification**: and
   - Acceptable second form of identification: either a second form of government-issued identification, major credit card (i.e. Visa®, MasterCard®, or American Express®), check cashing card, or bank debit card.

3. **Authorization Code**.
   - This is the Authorization Code that the candidate received in an email following the Webassessor™ scheduling process.

*Please note that a Social Security Card is not an acceptable form of identification.*

The candidate should arrive at the testing center up to 15 minutes early and provide the proctor at the testing center with his/her personal Authorization Code and his/her two (2) valid forms of identification. No testing aids are permitted – calculator, scratch paper, dictionary, etc. Personal possessions such as cellular phones, briefcases or backpacks may be collected by the proctor, stored in a secured area, and returned after the test session.

**Taking the Examination**

There are one hundred and five (105) multiple-choice questions on the examination. Candidates will be given two (2) hours to complete the examination.

The examination utilizes dichotomous scoring, meaning the answer selections are either right or wrong.

- The candidate will earn one (1) point for getting the question right (correct).
- The candidate will earn zero (0) points for getting the question wrong (incorrect).

A few questions on the examination require the candidate to select two (2) answers. For these particular questions, the candidate must select two (2) answer options out of the four (4) options available (A, B, C, D) or out of five (5) options available (A, B, C, D, E). A few questions may request you to select three (3) answers out of five (5).
Test Aids

The following document(s) are to be given to the Test Taker upon entrance to the testing room. At the end of the exam, the document(s) will be collected and shredded by the proctor at the testing center.

1. (2) Two pencils
2. (3) Three pieces of scratch paper numbered 1-3

Examination Security

IHS owns all proprietary rights and interests of the examination, including but not limited to copyright, trade secret, and/or patented information, as well as all Examination materials, including but not limited to, the Study Guide, the examination, and the answer key to the examination.

The examination is confidential. It will be made available to the candidate, solely for the purpose of assessing the candidate’s proficiency level in the hearing healthcare professional skill areas. To protect the integrity of the examination, candidates are prohibited from disclosing the contents of this examination, including, but not limited to, questions, form of questions, or answers, in whole or in part, in any form or by any means (i.e. verbal, written, electronic) to any third party for any purpose. Copying or communicating examination content is prohibited and may result in the cancellation of examination results.

Candidates are at all times to maintain a professional attitude toward other candidates, proctors, and other examination personnel. In IHS’s sole discretion, conduct that is, or results in, a violation of security or disrupts the administration of the examination may result in immediate disqualification and ejection from the examination. Such conduct includes, but is not limited to, cheating, failing to follow all rules and instructions governing the administration of the examination, or otherwise compromising the security or integrity of the examination. Children will not be allowed to accompany candidates into the testing center.

- Additionally, candidates may not bring:
  - Tobacco products, food, drinks, chewing gum, notes, scrap paper, books, purses, briefcases, backpacks, hats, calculators, or cell phones into the testing center.

- No smoking, eating, or drinking is allowed in the testing center.

- Any candidate that brings unauthorized materials will be asked to surrender all Examination materials and to leave the testing center without a refund.
Once candidates have been seated and the examination begins, candidates may only leave the examination center to use the restroom, and only after obtaining permission from the proctor. Candidates electing to use the restroom during the examination will not receive extra time to complete the examination.

IHS will notify the licensing board of any known examination security violations and if IHS has the ability, will provide the licensing board with a recommended course of action.
After the Examination

Upon completion of the examination, the candidate will receive a “Test Completion” email message from Webassessor™. Candidates will not receive examination results immediately. DO NOT CALL THE INTERNATIONAL HEARING SOCIETY FOR EXAM RESULTS.

Examination Scoring

The examination is comprised of one hundred and five (105) test questions (items). Test-takers will receive a score based upon their performance on eighty (80) scored items.

The examination is comprised of 80 scored and 25 non-scored (pilot) test questions. Administering pilot (non-scored) items allows the International Hearing Society to collect data on new items and assemble subsequent exams.

This examination utilizes dichotomous scoring, meaning the answer selections are either right or wrong. The candidate will earn one (1) point for getting the question right (correct). The candidate will earn zero (0) points for getting the question wrong (incorrect). In our research we found this scoring method to not only be the standard for healthcare examinations but for competency exams as a whole.

Results

A score report will be provided to the state/provincial licensing board. IHS provides a recommended passing score, but the ultimate pass/fail decision is up to the licensing body. The licensing board will contact the candidate with the examination results, except Colorado candidates. All inquiries regarding the status or results of your examination should be directed to the state/provincial licensing board, not to the International Hearing Society. The International Hearing Society is not permitted to share performance information directly with candidates, except Colorado candidates. DO NOT CALL IHS FOR EXAM RESULTS.

Please note: The state of Colorado has adopted the IHS recommended passing score. Colorado candidates will receive a score report directly from the International Hearing Society.

Re-Takes

If a candidate does not pass the examination, he/she may be eligible to schedule another examination appointment. Candidates should check with their licensing board for next steps. For re-takes, the candidate must pay the examination fee of $225.00 (USD) at the time of rescheduling.
Score Reporting

IHS provides the licensing boards with a recommended passing score, but ultimately, the licensing board is responsible for making the pass/fail decision of the candidate. The licensing agency is responsible for communicating the candidate’s examination result to the candidate, except in Colorado. PLEASE DO NOT CALL THE INTERNATIONAL HEARING SOCIETY FOR EXAM RESULTS.

Please note: The state of Colorado has adopted the IHS recommended passing score. Colorado candidates will receive a score report directly from the International Hearing Society.

- **IHS recommends that licensing boards report only pass/fail decisions based on overall exam performance.**

  The IHS recommended passing score is on a raw score (i.e., number correct) scale. As IHS creates new operational forms, they may not be exactly the same difficulty as the current test form. If the difficulty of the form changes, keeping the exact same passing score would not be appropriate. We use statistical methods (i.e., equating) to identify a passing score on the new form that conveys the same level of expectations as the passing score on the previous form. Therefore, the actual passing score may change, but the meaning of the passing score (i.e., the level of knowledge and skills required for a passing score) would remain the same. In order to prevent confusion regarding passing scores when candidates take the test multiple times (using different forms), IHS recommends that licensing boards only report pass/fail decisions to candidates (as opposed to raw scores or percent correct scores).

- **IHS does not provide section level results on the assessment.**

  The International Licensing Examination for Hearing Healthcare Professionals was developed to aid in licensure decisions for hearing healthcare professionals (e.g., competent or not competent as determined by pass/fail decision). The test was designed based on input from a formal job analysis study and survey of professionals in the field. The test content is organized into several sections (i.e., areas relevant for safe and effective practice). However, in order to balance accurate pass/fail decisions and reasonable test lengths, the test was not designed to provide diagnostic information at the section level as any performance measures reported at this level would be considered unreliable.

Score Verification

There is no appeal process through IHS for challenging individual examination questions or results. However, in some jurisdictions, candidates may be able to request a score verification for a fee of $150.00 (USD) per examination. Should candidates have any questions regarding their local licensing board’s policies or procedures, as it relates to score verifications or other matters, candidates are advised to contact their licensing board.

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4 Score Verification is not permitted in the state of Colorado.
IMPORTANT NOTICE

If you will take the licensing examination on or after May 1, 2016, please read this important notification.

As you have read, the International Licensing Examination for Hearing Healthcare Professionals (the “ILE”) serves an important role in the licensure process for new hearing healthcare providers. The ILE’s primary purpose is to accurately identify candidates with the knowledge, skills, and abilities necessary for safe and effective entry-level practice as hearing care professionals. The International Hearing Society (IHS) began the process of updating its Competency Model and the ILE exam in 2015 to ensure relevant and current exam content. This message is intended to provide you with details about the transition to an updated Competency Model on May 1, 2016.

Important 2016 Dates:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1, 2016</td>
<td>The updated Competency Model takes effect</td>
</tr>
<tr>
<td>Early June, 2016</td>
<td>The passing score for the updated ILE is determined based on a standard setting study.</td>
</tr>
<tr>
<td>Mid-June 2016</td>
<td>Pass/fail decisions for exams administered in May and early June are reported to licensing agencies.</td>
</tr>
</tbody>
</table>

Release of the Updated IHS Competency Model – May 1, 2016

Professional standards require that high-stakes credentialing programs regularly review and update exams and Competency Models to ensure that they remain aligned with current best practices. Therefore, approximately every 5-7 years, IHS conducts a job analysis study to collect input from the professional community to identify necessary revisions. The updated Competency Model is the outcome of the most recent study, which was completed in mid-2015 through the use of focus groups and a survey of licensed hearing practitioners.

The updated Competency Model is available on page 31. It includes the most important knowledge, skills and abilities necessary for safe and effective practice by entry-level hearing healthcare professionals and also provides information about the amount of the exam that will be dedicated to each of these areas. The updated Competency Model will officially replace the current Competency Model as of May 1, 2016. While the updated Competency Model contains many elements similar to those in the current Competency Model, the structure and relative weightings of the various elements have been updated based on the practitioner feedback collected as part of the study mentioned above.

If you will take the licensing examination on or after May 1, 2016, please prepare yourself with the updated Competency Model.
**Release of an Updated Exam Form**

Because the ILE is based on the IHS Competency Model, when the Competency Model changes, the examination must change with it. Therefore, **IHS will release an updated version of the ILE based on the updated Competency Model on May 1, 2016 as well.** Although the content of the exam will now be aligned to the updated Competency Model, the format of the ILE will remain largely unchanged: The exam will still consist of 105 multiple-choice questions (80 scored items, 25 unscored pilot items), and will continue to utilize dichotomous scoring, meaning the answer selection(s) are either right or wrong. Candidates will earn one (1) point for getting the question right (correct), and will earn zero (0) points for getting the question wrong (incorrect).

**Resetting the Passing Score**

In the same way that it is necessary to update the Competency Model to ensure that the content of the examination is relevant and current, it is also necessary to periodically review the ILE passing score to ensure that the performance level necessary for passing the exam is appropriate for entry-level practitioners.

Because the most critical outcome of a licensure exam is the pass/fail decision, the passing score must be defensible and reflect the knowledge, skills, and abilities necessary for entry-level practice. Therefore, **the IHS-recommended passing score for the updated ILE will be obtained through a systematic standard setting study that will be conducted in early June 2016.** Standard setting is the process of defining the performance expectations of the minimally qualified candidate and translating that performance expectation into a passing score. The standard setting study will be conducted with the input of an independent panel of practicing hearing healthcare professionals and facilitated by an independent third-party testing organization.

Please note: **Because the passing score for the exam will not be finalized until early June, candidates who take the examination in May and early June should expect a delay in the reporting of the pass/fail decision until mid-June. For examinations given after mid-June, score reporting will return to its current schedule.**

**Test Taker Notification**

On February 1, 2016 IHS began to inform eligible test takers of the updated Competency Model in this Study Guide. It will be noted that test takers scheduled to sit for the exam starting May 1 will be testing based on the updated Competency Model. Furthermore **test takers during May and June 2016 will experience a delay in receiving test scores.** The current Study Guide is always available to download at www.webassessor.com/ihs.

If you have any questions regarding the examination, please contact exam@ihsinfo.org. IHS appreciates your patience during this transition.
Recommended Reference Material

These textbooks and practical experience are essential to your training. Be aware that no single publication or resource contains all the information you will need to learn. The vocabulary and concepts that are presented in these materials are important to your ongoing success in the profession. The hands-on experience you will get by actively working in a practice/clinical setting will help you to understand and apply the material presented. It is important to regularly discuss these concepts with your sponsor or mentor, especially any material you find difficult.

This examination is "practice-based", meaning that you will be expected to understand and apply the information from these textbooks in your everyday professional work. Exam questions are drawn from, and referenced to all of the recommended reference materials in the study guide, not just IHS’ Distance Learning course. In addition, examination questions will change over time. All examination questions have been evaluated for appropriateness.

- **IHS’ Distance Learning for Professionals in Hearing Health Sciences course**  
  [www.ihsinfo.org/dlonline](http://www.ihsinfo.org/dlonline)

- **Hearing Instrument Science & Fitting Practices**  

- **Introduction to the Auditory System**  
  MI: International Hearing Society (2005)

- **Masking: Practical Applications of Masking Principles and Procedures**  

- **Outcome Measures & Troubleshooting**  

- **Altering Behaviors: A Powerful Approach to Aural Rehabilitation**  

- **Audioprosthology: Hearing Instrument Selection, Fitting, and Verification**  

- **Digital Signal Processing for Hearing Aids**  
  A supplement to the workbook  

- **Trainer Manual**  
  MI: International Hearing Society (2013)  
  [www.ihsinfo.org/trainermanual](http://www.ihsinfo.org/trainermanual)

- **Introduction to Audiology**  
  (11th ed.) Martin, Frederick and John Clark, NY: Allyn & Bacon (2011) Purchase online at [www.pearsonhighered.com](http://www.pearsonhighered.com)

- **Fitting and Dispensing Hearing Aids**  

- **Infection Control in the Audiology Clinic**  
  (2nd ed.) Bankaitis, A.U and Robert Kemp  
  MO: Oaktree Products (2005) Purchase online at [www.oaktreeproducts.com](http://www.oaktreeproducts.com)

- **Roeser's Audiology Desk Reference: A Guide to the Practice of Audiology**  

- **The Comprehensive Dictionary of Audiology**  
  Illustrated by Brad A. Stach, PhD  
  (2nd ed.) Maryland: William & Wilkins (1997)

Note: Only IHS textbooks are available for purchase at [www.ihsinfo.org](http://www.ihsinfo.org)
The examination content is determined by the following competency model. The content and weighting of the competency model was based on input by professionals in the field who completed a survey identifying the most important knowledge, skills and abilities necessary for safe and effective practice by an entry-level hearing healthcare professional.

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Observe proper sanitary procedures.</th>
<th>% of Total Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1.1</td>
<td>Observe sanitation protocols to protect the patient/client and the practitioner.</td>
<td>3.33%</td>
</tr>
<tr>
<td>Objective 1.2</td>
<td>Observe protocols to clean and sanitize equipment and surfaces in the practice environment.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2</th>
<th>Perform hearing evaluation.</th>
<th>20.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 2.1</td>
<td>Identify the patient’s/client’s needs.</td>
<td></td>
</tr>
<tr>
<td>Objective 2.2</td>
<td>Perform a visual inspection of the patient’s/client’s ear(s) to identify contraindications for proceeding with the hearing evaluation.</td>
<td></td>
</tr>
<tr>
<td>Objective 2.3</td>
<td>Perform tympanometry.</td>
<td></td>
</tr>
<tr>
<td>Objective 2.4</td>
<td>Perform audiometric testing.</td>
<td></td>
</tr>
<tr>
<td>Objective 2.5</td>
<td>Interpret evaluation results for the purpose of patient/client information, hearing instrument candidacy, referral, and/or communication with other healthcare professionals.</td>
<td></td>
</tr>
<tr>
<td>Objective 2.6</td>
<td>Describe the anatomy and physiology of the human auditory system.</td>
<td></td>
</tr>
</tbody>
</table>

5 Note: The “% of Total Exam” indicator is an estimate of how much of the Examination may relate to each topic.
### Section 3
**Select appropriate amplification for the patient/client.**

<table>
<thead>
<tr>
<th>Objective 3.1</th>
<th>Identify limitations of the patient/client that impact the selection of style/type of amplification.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 3.2</td>
<td>Identify patient/client preferences for style/type of amplification.</td>
</tr>
<tr>
<td>Objective 3.3</td>
<td>Identify electro-acoustic parameters for amplification.</td>
</tr>
<tr>
<td>Objective 3.4</td>
<td>Identify patient/client lifestyle influences that impact selection of style/type of amplification.</td>
</tr>
<tr>
<td>Objective 3.5</td>
<td>Recommend appropriate style/type of amplification to patient/client.</td>
</tr>
</tbody>
</table>

### Section 4
**Perform accurate and safe earmold impressions.**

<table>
<thead>
<tr>
<th>Objective 4.1</th>
<th>Perform visual inspection of the patient’s/client’s ear(s) for otoblock placement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 4.2</td>
<td>Select and place appropriate otoblock in patient's/client's ear.</td>
</tr>
<tr>
<td>Objective 4.3</td>
<td>Take appropriate impression for style/type of acoustic coupler or ear plug.</td>
</tr>
</tbody>
</table>

### Section 5
**Fit and dispense hearing instruments.**

<table>
<thead>
<tr>
<th>Objective 5.1</th>
<th>Perform physical and/or electronic check of hearing instrument to verify it is as ordered and operating correctly.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 5.2</td>
<td>Fit hearing instrument using computerized algorithms or other appropriate methods.</td>
</tr>
<tr>
<td>Objective 5.3</td>
<td>Place hearing instrument in patient’s/client’s ear and verify fit.</td>
</tr>
<tr>
<td>Objective 5.4</td>
<td>Modify hearing instrument and/or earmold for comfort and proper acoustic performance.</td>
</tr>
</tbody>
</table>

### Section 6
**Perform validation and verification of hearing instrument fittings.**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 6.2</td>
<td>Perform verification of the fitting of the hearing instrument.</td>
</tr>
<tr>
<td>Section 7</td>
<td>Provide counseling regarding living with hearing loss.</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Objective 7.1</td>
<td>Discuss appropriate expectations of amplification with patient/client and family members/caregivers.</td>
</tr>
<tr>
<td>Objective 7.2</td>
<td>Discuss use of hearing instrument with patient/client and family members/caregivers.</td>
</tr>
<tr>
<td>Objective 7.3</td>
<td>Discuss coping strategies with patient/client and family members/caregivers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 8</th>
<th>Provide aural rehabilitation.</th>
<th>11.11%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 8.1</td>
<td>Implement therapeutic adjustments.</td>
<td></td>
</tr>
<tr>
<td>Objective 8.2</td>
<td>Discuss aural rehabilitation with patient/client.</td>
<td></td>
</tr>
<tr>
<td>Objective 8.3</td>
<td>Discuss with family/caregivers their role in aural rehabilitation.</td>
<td></td>
</tr>
<tr>
<td>Objective 8.4</td>
<td>Discuss with patient/client environmental listening strategies.</td>
<td></td>
</tr>
<tr>
<td>Objective 8.5</td>
<td>Educate the patient/client and family/caregivers on use of assistive devices and accessories to complement the hearing instrument fitting.</td>
<td></td>
</tr>
<tr>
<td>Objective 8.6</td>
<td>Recommend additional resources.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 9</th>
<th>Provide post-fitting patient/client and hearing instrument care.</th>
<th>4.44%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 9.1</td>
<td>Provide ongoing care for patient/client.</td>
<td></td>
</tr>
<tr>
<td>Objective 9.2</td>
<td>Provide ongoing care and maintenance for hearing instruments.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 10</th>
<th>Investigate patient’s/client’s perceived problems with hearing instruments and take appropriate action.</th>
<th>6.67%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 10.1</td>
<td>Troubleshoot hearing instrument performance.</td>
<td></td>
</tr>
<tr>
<td>Objective 10.2</td>
<td>Repair hearing instruments.</td>
<td></td>
</tr>
</tbody>
</table>

If you will take the examination on or after May 1, 2016, please refer to the updated Competency Model on page 31.
# Acronym/Abbreviation List

Please be familiar with these acronyms and abbreviations which may be used on the examination.

<table>
<thead>
<tr>
<th>Acronym/Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC - Air Conduction</td>
<td>NAL-NL - National Acoustic Laboratories - Non-Linear</td>
</tr>
<tr>
<td>A/D - Analog-to-digital</td>
<td>NAL-NL1 (see above)</td>
</tr>
<tr>
<td>ALD - Assistive Listening Device</td>
<td>NAL-NL2 (see above)</td>
</tr>
<tr>
<td>ANSI - American National Standards Institute</td>
<td>NAL-R - National Acoustic Laboratories-Revised</td>
</tr>
<tr>
<td>APHAB - Abbreviated Profile of Hearing Aid Benefit</td>
<td>NOAAH - software interface</td>
</tr>
<tr>
<td>BC - Bone Conduction</td>
<td>NU-6 - Northwestern University Word List -6</td>
</tr>
<tr>
<td>BAHA - Bone-Anchored Hearing Aid</td>
<td>OAE - Otoacoustic Emissions</td>
</tr>
<tr>
<td>BiCROS - Bilateral Contralateral Routing of Signal</td>
<td>OSPL90 Output Sound Pressure Level with 90dB input</td>
</tr>
<tr>
<td>BTE - Behind-the-Ear</td>
<td>PB Max - Patient Maximum Performance with Phonetically Balanced Word List</td>
</tr>
<tr>
<td>CIC - Completely-In-the-Canal</td>
<td>POGO Prescription of Gain and Output</td>
</tr>
<tr>
<td>COSI - Client Oriented Scale of Improvement</td>
<td>PSAP Personal Sound Amplification Product</td>
</tr>
<tr>
<td>CROS - Contralateral Routing of Signal</td>
<td>PTA Pure Tone Average</td>
</tr>
<tr>
<td>D/A - Digital-to-Analog</td>
<td>REAR Real Ear Aided Response</td>
</tr>
<tr>
<td>dB - Decibel</td>
<td>RECD Real Ear to Coupler Difference</td>
</tr>
<tr>
<td>dB HL - Decibels Hearing Level</td>
<td>REIG Real Ear Insertion Gain</td>
</tr>
<tr>
<td>dB SPL Decibels Sound Pressure Level</td>
<td>REIR Real Ear Insertion Response</td>
</tr>
<tr>
<td>DSL I/O Desired Sensation Level Input/Output</td>
<td>REM Real Ear Measurements</td>
</tr>
<tr>
<td>DSP Digital Signal Processing</td>
<td>REOG Real Ear Occluded Gain</td>
</tr>
<tr>
<td>ENT Ear-Nose-Throat</td>
<td>REOR Real Ear Occluded Response</td>
</tr>
<tr>
<td>FM - Frequency Modulation</td>
<td>RESR Real Ear Saturation Response</td>
</tr>
<tr>
<td>FOG Full-on-Gain</td>
<td>REUR Real Ear Unaided Response</td>
</tr>
<tr>
<td>HF High Frequency</td>
<td>RIC Receiver-in-Canal</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>HFA</td>
<td>High Frequency Average</td>
</tr>
<tr>
<td>HL</td>
<td>Hearing Level</td>
</tr>
<tr>
<td>HTL</td>
<td>Hearing Threshold Level</td>
</tr>
<tr>
<td>Hz</td>
<td>Hertz</td>
</tr>
<tr>
<td>IHAFF</td>
<td>Independent Hearing Aid Fitting</td>
</tr>
<tr>
<td>IIE</td>
<td>Invisible in Canal</td>
</tr>
<tr>
<td>ITC</td>
<td>In-the-Canal</td>
</tr>
<tr>
<td>ITE</td>
<td>In-the-Ear</td>
</tr>
<tr>
<td>LDL</td>
<td>Loudness Discomfort Level</td>
</tr>
<tr>
<td>mA</td>
<td>Milliampere</td>
</tr>
<tr>
<td>mAH</td>
<td>Milliampere Hours</td>
</tr>
<tr>
<td>MCL</td>
<td>Most Comfortable Loudness Level</td>
</tr>
<tr>
<td>MPO</td>
<td>Maximum Power Output</td>
</tr>
<tr>
<td>NAL</td>
<td>National Acoustic Laboratories</td>
</tr>
<tr>
<td>NAL-L</td>
<td>National Acoustic Laboratories-Linear</td>
</tr>
<tr>
<td>SAT</td>
<td>Speech Awareness Threshold</td>
</tr>
<tr>
<td>SAV</td>
<td>Select-a-vent</td>
</tr>
<tr>
<td>SIN</td>
<td>Speech in Noise</td>
</tr>
<tr>
<td>SL</td>
<td>Sensation Level</td>
</tr>
<tr>
<td>SPL</td>
<td>Sound Pressure Level</td>
</tr>
<tr>
<td>SRT</td>
<td>Speech Reception Threshold</td>
</tr>
<tr>
<td>TM</td>
<td>Tympanic Membrane</td>
</tr>
<tr>
<td>UCL</td>
<td>Uncomfortable Loudness Level</td>
</tr>
<tr>
<td>VC</td>
<td>Volume Control</td>
</tr>
<tr>
<td>WRS</td>
<td>Word Recognition Score</td>
</tr>
</tbody>
</table>
A. **Domain**: Broad areas of practice assessed on the exam.

B. **Domain Weight**: The percent of items on the exam that fall within the Domain.

C. **Objective**: Specific elements of the Domain that are assessed on the exam. Each exam item is written to target a specific Objective.

D. **Objective Weight**: The percent of items on the exam that fall within the Objective.

E. **Additional Objective Information**: Illustrative examples of the types of knowledge, skills, and abilities assessed by items within the Objective.
Domain 1. Conduct Patient/Client Assessment (18-24%)

Objective 1.1 Apply infection control protocols (4-6%)

Includes but is not limited to choosing appropriate infection control processes for tools and equipment; observing universal precautions for infection control; distinguishing between single- and multiple-use items; differentiating among sanitization, disinfection and sterilization processes; and identifying personal protective equipment.

Objective 1.2 Apply otoscopic inspection protocols (5-7%)

Includes but is not limited to observing safety protocols during otoscopy; identifying anatomical structures; identifying abnormalities through otoscopic inspection; and recognizing the presence of referral criteria. This objective helps provide evidence of the candidate’s ability to perform otoscopy.

Objective 1.3 Utilize audiometric testing protocols (9-11%)

Includes but is not limited to performing air and bone conduction threshold and suprathreshold testing; performing speech audiometry; performing effective masking; and applying principles of immittance audiometry. This objective helps provide evidence of the candidate’s ability to perform audiometric testing.

Domain 2. Interpret and Apply Assessment Results (25-31%)

Objective 2.1 Interpret and explain audiometric results (10-12%)

Includes but is not limited to demonstrating an understanding of referral criteria; interpreting pure tone and speech testing results; identifying the need for additional testing; identifying the degree and configuration of hearing loss; and identifying the type of hearing loss.

Objective 2.2 Determine candidacy for amplification (7-9%)

Includes but is not limited to interpreting the case history and outlining contraindications to hearing instrument use.

Objective 2.3 Determine recommendation for amplification (8-10%)

Includes but is not limited to analyzing test results, case history and observations; establishing fitting objectives and goals; and determining devices to be utilized in action plan.
Domain 3. Select Hearing Devices (18-20%)

Objective 3.1 Select style and type of hearing instruments (10-12%)

Includes but is not limited to selecting specific hearing instruments based on test results, case history, and individual patient/client preferences and lifestyle; selecting electroacoustic and physical properties; and evaluating the need for accessory devices.

Objective 3.2 Select earmold or other acoustic coupler (6-8%)

Includes but is not limited to assessing physical properties of the outer ear, taking ear impressions, critiquing ear impressions, and selecting coupler based on patient/client needs.

Domain 4. Fit and Dispense Hearing Devices (16-22%)

Objective 4.1 Utilize protocols to fit hearing instruments and other devices (10-12%)

Includes but is not limited to confirming physical and acoustic integrity of hearing devices; programming and adjusting hearing devices; verifying physical fit and acoustic comfort; orienting patient/client to hearing instruments; and orienting patient/client to assistive devices. This objective helps provide evidence of the candidate’s ability to program and dispense hearing instruments and other devices.

Objective 4.2 Verify fitting (3-5%)

Includes but is not limited to selecting verification method based on patient/client; assessing physical and acoustic integrity of hearing devices; interpreting and explaining verification results; and modifying physical and acoustic parameters of device. This objective helps provide evidence of the candidate’s ability to perform fitting verification (e.g., speech mapping, REM).

Objective 4.3 Validate fitting (3-5%)

Includes but is not limited to selecting validation method based on patient/client; interpreting and explaining validation results; and modifying physical and acoustic parameters of device. This objective helps provide evidence of the candidate’s ability to perform fitting validation (e.g., questionnaire, self-assessment).
Domain 5. Provide Continuing Care (11-17%)

Objective 5.1 Implement aural rehabilitation and counseling (5-7%)

Includes but is not limited to demonstrating an understanding of the psychology of the hearing impaired; defining and managing patient/client expectations for improved communication; defining and managing family/caregiver expectations for improved communication; and identifying communication strategies.

Objective 5.2 Apply instrument maintenance and troubleshooting protocols (5-7%)

Includes but is not limited to employing hearing instrument cleaning procedures; performing listening checks on hearing instruments; troubleshooting acoustic properties of hearing instruments; and adjusting based upon changes in patient/client hearing loss and/or listening needs. This objective helps provide evidence of the candidate’s ability to maintain and troubleshoot instrument performance.

Objective 5.3 Interpret electroacoustic analysis results (1-3%)

Includes but is not limited to identifying need for electroacoustic analysis and comparing electroacoustic analysis of patient’s/client’s hearing instruments to fitting specifications.

###
Sample Test Questions

How to Analyze and Correctly Answer Exam Questions

The International Licensing Examination for Hearing Healthcare Professionals emphasizes practice-based knowledge, rather than just simple memorization of facts. It assumes that the facts have been memorized and that the minimally qualified candidate understands and knows how to apply those facts.

Three sample test questions are dissected below to show the knowledge and logic that must be utilized to arrive at the correct answer. Please use this exercise to answer the sample questions and remember the process when you sit for the actual examination.

Example 1:

Why should an otoblock be placed just beyond the second bend of the ear canal during preparation for taking an ear impression?

A: prevents the otoblock from moving during the impression process
B: results in a complete impression of the canal cross section *
C: results in a complete impression of the outer ear
D: prevents cerumen from interfering with the impression

Immediately eliminate D. You should have ensured that the physician has removed any interfering cerumen (which would prevent your taking an impression in the first place).

C is attractive because it sounds as if you are making a complete impression. But we do not capture the entire pinna in an impression, so the choice is too broad and is not correct.

Choice A is also attractive because we want to prevent otoblock movement as much as possible. But that deals with the selection of the correct size otoblock rather than its placement – you always want to place the otoblock just beyond the second bend.

This leaves B as the only correct answer.
Example 2:

Which validation method can be effectively performed in a sound field environment?

A: COSI
B: IHAFF
C: NU-6 *
D: REIR

To answer this question correctly, you must know what each acronym means. If you do, you will recognize that one of the choices is not a validation method and that two others do not involve a sound field environment.

Choice A is a questionnaire; choice B is a fitting formula, and choice D is a real ear measurement. Only choice C – a list of phonetically balanced words – is appropriately used in a sound field environment.

This is a perfect example of what is meant by a “practice-based” question.

Example 3:

A patient/client has been using an ITC hearing instrument for approximately 16 months. The patient/client has a new job that requires the use of a telephone with a headset. The patient/client is having difficulty understanding customers over the phone. What should the hearing healthcare professional recommend to the patient/client?

A: add a clarifier circuit to the existing phone
B: adjust volume to maximum while on the phone
C: add an amplifier to the existing phone *
D: cover the other ear while on the phone

Choice D is likely not to help, either, and may in fact be totally impractical.

Adding a readily available amplifier to the phone, as stated in choice C, is the best way to help this person.

The first step here is to eliminate the very nebulous choice A – ask yourself just what kind of clarifier are you adding, where do you get it and how do you install it? It’s extremely unlikely that such a device exists.

Choice B, likewise, is a bad idea. It is likely to introduce distortion and/or acoustic feedback, not contribute to clarity.

Please note: Use of this guide does not assure you a passing score on the examination.
Sample Test Questions

The sample test questions are for informational purposes only. The sample questions are designed to familiarize you with the exam format and cannot be considered a measure of competency. Actual examination items (test questions) have been selected from each of the competency areas.

1. Which two actions must a hearing healthcare professional perform before testing an existing patient's/client's hearing?
   A: clean hands in view of patient/client
   B: clean patient's/client's hearing instruments
   C: clean patient's/client's canal of obstructive cerumen
   D: clean or replace speculum from otoscope

2. What should be used to clean circumaural headphones?
   A: hydrogen peroxide
   B: disinfectant spray
   C: isopropyl alcohol
   D: disinfectant towelette

3. How does an osteoma present?
   A: dark, irregular demarcation of the pinna
   B: bony growth in the external auditory canal
   C: excessive inflammation of the external auditory canal
   D: calcification of the tympanic membrane

4. A patient's/client's audiometric test results indicate the following:
   - Normal hearing through 1000Hz with a precipitous drop to moderately-severe to severe high-frequency hearing loss bilaterally.
   - Bone conduction thresholds are 5-10dB better than air conduction thresholds.
   - Speech Reception Thresholds of 25dB HL are significantly better than pure tone averages.
   - Word recognition presented at 75 dBHL indicates good understanding in quiet.

Which testing procedure requires masking?
   A: pure tone air conduction
   B: pure tone bone conduction
   C: speech reception threshold
   D: word recognition
5. What should a hearing healthcare professional do prior to administering a Speech Reception Threshold test?

A: discuss the pure tone results  
B: familiarize the patient with the word list  
C: introduce the carrier phrase  
D: explain masking of the non-test ear

6. Refer to the exhibit.

![Tympanogram Graph](image)

What tympanogram type is represented in the graph displayed in the exhibit?

A: A  
B: A_{cd}  
C: B  
D: C
7. A 36-year old female restaurant worker with a family history of hearing loss reports that she is unable to hear as well as she did two years ago. Testing reveals a moderate conductive hearing loss.

What is the likely cause of the patient’s/client’s change in hearing?

A: presbycusis  
B: otosclerosis  
C: ototoxicity  
D: Meniere’s Disease

8. Which portion of the ear contains sebaceous glands?

A: inferior section of middle ear cavity  
B: inner portion of external auditory canal  
C: anterior portion of internal auditory canal  
D: outer portion of external auditory canal

9. What general effect does natural ear canal resonance have on sounds entering the ear canal?

A: suppresses frequencies below 1000 Hz  
B: boosts frequencies between 500 and 1500 Hz  
C: boosts frequencies between 2000 and 3000 Hz  
D: suppresses frequencies above 2500 Hz

10. Which factor will affect a patient's/client's acceptance and use of hearing instruments?

A: cause of the hearing loss  
B: patient's/client's dominant hand  
C: patient's/client's cosmetic preferences  
D: frequency and duration of hearing instrument use

11. In a hearing instrument, what is the term for the entire frequency range within which unique, specific signal processing is performed?

A: band  
B: channel  
C: memory  
D: program
12. Which two conditions are contraindications to taking an ear impression without prior medical clearance?
   A: perforated tympanic membrane
   B: lack of cerumen
   C: otitis externa
   D: epithelial migration

13. Why should an otoblock be placed just beyond the second bend of the ear canal during preparation for taking an ear impression?
   A: prevents the otoblock from moving during the impression process
   B: results in a complete impression of the canal
   C: results in a complete impression of the outer ear
   D: prevents cerumen from interfering with the impression

14. What should a hearing healthcare professional do immediately after placing an otoblock?
   A: use an alcohol wipe to sanitize the top of the impression tool
   B: pull tube or thread to test tightness of the otoblock
   C: use an earlight to verify that the otoblock is deep enough
   D: use the otoscope to check for gaps around the canal wall

15. Which step should a hearing healthcare professional complete immediately after removing an impression from a patient’s/client’s ear?
   A: visually inspect ear impression for flaws
   B: use otoscope to verify complete removal and condition of canal
   C: use earlight to check for bleeding deep in the canal
   D: use tissue to wipe oil from the concha and canal

16. Which step should a hearing healthcare professional take after performing a 2cc coupler hearing aid test on a repaired BTE hearing instrument?
   A: print out the data for the patient/client
   B: retube the BTE instrument with #13HW tubing
   C: compare 2cc data to original specifications
   D: recalibrate the test equipment
17. Why should a hearing healthcare professional use the DSL I/O fitting formula instead of the NAL fitting formula to fit and adjust a hearing instrument that uses DSP?

A: DSL-IO applies to non-linear instrumentation  
B: NAL uses the half-gain rule  
C: NAL requires a programmable circuit  
D: DSL-IO is an output formula

18. Which validation method can be effectively performed in a sound field environment?

A: COSI  
B: IHAFF  
C: NU-6  
D: REIR

19. Which sound field test should be used to evaluate the benefit of directional microphones?

A: Speech Perception in Noise (SPIN)  
B: Quick Speech in Noise (QuickSIN)  
C: Connected Speech Test (CST)  
D: Hearing in Noise Test (HINT)

20. A hearing healthcare professional is counseling a patient/client about expectations of amplification. Which information should the hearing healthcare professional include in this hearing therapy?

A: outside factors that can hinder understanding  
B: electronic parameters of the hearing instruments  
C: auditory practice and disability  
D: hearing instrument care and modifications

21. A patient/client has been using an ITC hearing instrument for approximately 16 months. The patient/client has a new job that requires the use of a telephone with a headset. The patient/client is having difficulty understanding customers over the phone. What should the hearing healthcare professional recommend to the patient/client?

A: add a clarifier circuit to the existing phone  
B: adjust volume to maximum while on the phone  
C: add an amplifier to the existing phone  
D: cover the other ear while on the phone
22. A patient/client complains that the hearing instrument works intermittently. After initial inspection, the hearing healthcare professional squeezes and taps on the case. Which problem does the hearing healthcare professional likely suspect?

A: a receiver problem
B: a battery problem
C: an amplifier problem
D: a wiring problem

23. A hearing healthcare professional makes a new earmold for a post-auricular hearing instrument. The new earmold fits tightly in the helix area. What is the most likely result of this fitting?

A: a more comfortable and secure fitting earmold
B: there will be less resonance and "down in a well" effect
C: an increased likelihood of a sore spot in the ear
D: the earmold is likely to work its way out of the ear

End of Sample Test Questions
Answer Key to the Sample Test Questions

Below are the correct answers to the Sample Test Questions. Also provided is a reference to the section of the competency model and each objective. For additional information you may look up the listed reference.

1. Correct Answer: “A” and “D”  
   Section 1: Observe proper sanitary procedures.  
   Objective 1.1: Observe sanitation protocols to protect the patient/client and the practitioner. 
   Reference: Infection Control in the Audiology Clinic (2nd ed.)

2. Correct Answer: “D”  
   Section 1: Observe proper sanitary procedures.  
   Objective 1.2: Observe protocols to clean and sanitize equipment and surfaces in the practice environment. 
   Reference: Infection Control in the Audiology Clinic (2nd ed.)

3. Correct Answer: “B”  
   Section 2: Perform hearing evaluation.  
   Objective 2.2: Perform a visual inspection of the patient’s/client’s ear(s) to identify contraindications for proceeding with the hearing evaluation. 
   Reference: Introduction to Audiology (11th ed.)

4. Correct Answer: “D”  
   Section 2: Perform hearing evaluation.  
   Objective 2.4: Perform audiometric testing  
   Reference: Masking: Practical Applications of Masking Principles and Procedures (3rd ed.)

5. Correct Answer: “B”  
   Section 2: Perform hearing evaluation.  
   Objective 2.4: Perform audiometric testing  
   Reference: Introduction to Audiology (11th ed.)

6. Correct Answer: “D”  
   Section 2: Perform hearing evaluation.  
   Objective 2.5: Interpret evaluation results for the purpose of patient/client information, hearing instrument candidacy, referral, and/or communication with other healthcare professionals.  
   Reference: Lesson 14 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)
7. Correct Answer: “B”  
Section 2: Perform hearing evaluation.  
Objective 2.5: Interpret evaluation results for the purpose of patient/client information, hearing instrument candidacy, referral, and/or communication with other healthcare professionals.  
Reference: Introduction to the Auditory System

8. Correct Answer: “D”  
Section 2: Perform hearing evaluation.  
Objective 2.6: Describe the anatomy and physiology of the human auditory system.  
Reference: Introduction to the Auditory System

9. Correct Answer: “C”  
Section 2: Perform hearing evaluation.  
Objective 2.6: Describe the anatomy and physiology of the human auditory system.  
Reference: Lesson 1-2 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)

10. Correct Answer: “C”  
Section 3: Select appropriate amplification for the patient/client.  
Objective 3.2: Identify patient/client preferences for style/type of amplification.  
Reference: Lesson 17 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)

11. Correct Answer: “B”  
Section 3: Select appropriate amplification for the patient/client.  
Objective 3.3: Identify electro-acoustic parameters for amplification.  
Reference: Digital Signal Processing for Hearing Aids: A supplement to the workbook

12. Correct Answer: “A” and “C”  
Section 4: Perform accurate and safe earmold impressions.  
Objective 4.1: Perform visual inspection of the patient’s/client’s ear(s) for otoblock placement.  
Reference: Lesson 25-5 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)

13. Correct Answer: “B”  
Section 4: Perform accurate and safe earmold impressions.  
Objective 4.2: Select and place appropriate otoblock in patient’s/client’s ear.  
Reference: Lesson 25 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)
   Section 4: Perform accurate and safe earmold impressions.
   Objective 4.2: Select and place appropriate otoblock in patient’s/client’s ear.

15. Correct Answer: “B”
   Section 4: Perform accurate and safe earmold impressions.
   Objective 4.3: Take appropriate impression for style/type of acoustic coupler or ear plug.
   Reference: Lesson 25 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)

16. Correct Answer: “C”
   Section 5: Fit and dispense hearing instruments.
   Objective 5.1: Perform physical and/or electronic check of hearing instrument to verify it is as ordered and operating correctly.
   Reference: Lesson 24 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)

17. Correct Answer: “A”
   Section 5: Fit and dispense hearing instruments.
   Objective 5.2: Fit hearing instrument using computerized algorithms or other appropriate methods.
   Reference: Lesson 28 of the Distance Learning for Professionals in Hearing Health Sciences (Workbook 5th ed.)

18. Correct Answer: “C”
   Section 6: Perform validation and verification of hearing instrument fittings.
   Reference: Outcome Measures & Troubleshooting

19. Correct Answer: “B”
   Section 6: Perform validation and verification of hearing instrument fittings.
   Reference: Fitting and Dispensing Hearing Aids Taylor, Brian and Mueller, H. Gustav

20. Correct Answer: “A”
   Section 7: Provide counseling regarding living with hearing loss.
   Objective 7.1: Discuss appropriate expectations or amplification with patient/client and family members/caregiver.
   Reference: Introduction to Audiology (11th ed.)
21. Correct Answer: “C”
   Section 7: Provide counseling regarding living with hearing loss.
   Objective 7.3: Discuss coping strategies with patient/client and family
   members/caregivers.
   Reference: Altering Behaviors: A Powerful Approach to Aural Rehabilitation

22. Correct Answer: “D”
   Section 9: Provide post-fitting patient/client and hearing instrument care.
   Objective 9.2: Provide ongoing care and maintenance for hearing instruments.
   Reference: Lesson 30 of the Distance Learning for Professionals in Hearing Health
   Sciences (Workbook 5th ed.)

23. Correct Answer: “C”
   Section 10: Provide post-fitting patient/client and hearing instrument care.
   Objective 10.1: Troubleshoot hearing instrument performance.
   Reference: Outcome Measures & Troubleshooting

End of Answer Key
Frequently Asked Questions (FAQs)

• **How many questions are on the test?**
The examination is comprised of 105 multiple-choice items.

• **How much time is given for the Examination?**
One hundred and twenty (120) minutes are allowed to complete the examination from the time it starts.

• **How will the exam be scored?**
The examination utilizes dichotomous scoring, meaning the answer selections are either right or wrong. The test-taker will earn one (1) point for getting the question correct. The test-taker will earn zero (0) points for getting the question wrong (incorrect). In our research we found this scoring method to not only be the standard for healthcare exams but for competency exams as a whole.

• **Who decides if a candidate passed the examination?**
It is up to the state/provincial licensing board to determine if the test-taker passed or failed the examination. The International Hearing Society is not permitted to share performance information directly with candidates, except for Colorado candidates.

  *Please note: The state of Colorado has adopted the IHS recommended passing score. Colorado candidates will receive a score report directly from the International Hearing Society.*

• **What is the passing score?**
Candidates will receive a score based upon their performance on the overall examination. According to IHS, if the candidate score is at or above the passing score, the candidate passes the test. If the candidate score is below the cut score, the candidate fails the test, according to IHS.

IHS recommends that licensing bodies only report pass/fail decisions based on overall exam performance. The IHS recommended passing score is on a raw score (i.e., number correct) scale. As IHS creates new operational forms as part of ongoing test maintenance, the new forms may not be of exactly the same difficulty as the previous test forms. If the difficulty of the form changes, keeping the exact same passing score would not be appropriate. Therefore, the actual passing score may change, but the meaning of the passing score (i.e., the level of knowledge and skills required for a passing score) would remain the same.

In order to prevent confusion regarding passing scores when candidates take the test multiple times (using different forms), IHS recommends that licensing boards only report pass/fail decisions to candidates (as opposed to raw scores or percent correct scores).

IHS provides the licensing board with a recommended passing score, but ultimately, the licensing board is responsible for making the pass/fail decision of the candidate.
and for communicating the candidate’s examination result, except for Colorado candidates.

Please note: The state of Colorado has adopted the IHS recommended passing score. Colorado candidates will receive a score report directly from the International Hearing Society.

- **What is a cut score?**
  The minimum score required to pass the examination. Cut score can be expressed as a raw score, a percent score, or a scaled score. IHS used a modified Angoff standard setting study to determine an appropriate cut score for this operational form. Cut scores for subsequent operational forms will be determined via a statistical equating process. Once again, it is important to note that IHS recommends a minimum score required to pass, but ultimately, the licensing boards decide.

- **How was the passing score determined?**
  The IHS recommended passing score was obtained through a systematic standard setting study. Standard setting is the process of defining the performance expectations of the minimally qualified candidate and translating that performance expectation into a passing score. IHS chose to use the yes/no variation of the Angoff standard setting method for this study. This methodology is widely accepted and has been well documented and researched within the testing industry; it is commonly used for determining passing scores for licensure programs.

The standard setting study was conducted with the input of an independent panel consisting of experienced, licensed Hearing Aid Specialists. The study was facilitated by an independent third party testing organization that has extensive experience with the methodology.

*Ultimately, it is the responsibility of the licensing board to determine if a candidate has demonstrated sufficient competency to be eligible for a license.*

- **What is a candidate score?**
  The score achieved by a candidate. The candidate score is used to determine if the candidate passes or fails the examination. According to IHS, if the candidate score is at or above the cut score, the candidate passes the examination. If the candidate score is below the cut score, the candidate fails the examination according to IHS standards.

- **What is a score report?**
  A confidential report prepared by IHS containing information that documents the candidate’s test result. IHS recommends that licensing bodies only report pass/fail decisions based on overall exam performance.

- **What topics will the examination cover?**
  This assessment is based on the most recent competency model (exam blueprint). The exam blueprint identifies the competencies against which the candidate will be measured. It also indicates the weight (%) of each competency or group of competencies. The competency model is in this study guide for your review.
• **What textbooks and reference materials are recommended for this examination?**
A list of reference material is listed in this study guide. The test question pool for the exam have been developed using these references. No single reference can be recommended to use for your studies.

• **Should I buy the IHS Distance Learning course?**
It is highly suggested that the candidate purchase IHS’ *Distance Learning for Professionals in Hearing Health Sciences* course – the whole course package! It is a self-paced, independent self-study course. It is specifically designed as an introductory course to the profession. It is an excellent source of information for candidates to study and prepare for *this* written licensing examination. www.ihsinfo.org/dlonline

• **When will IHS’ Distance Learning course be updated?**
At this time, IHS is working on updating the *Distance Learning for Professionals in Hearing Health Sciences* course. A product release date is targeted for August 1, 2016.

• **What is IHS’ Trainer Manual?**
IHS’ newest product, the *Trainer Manual* is designed to provide a step-by-step plan for trainers/sponsors to lead their apprentices through the Distance Learning course in preparation for *this* written licensing examination. The content of the Trainer Manual is mapped to the competency model of this written exam and currently follows the outline of the DL course. This initiative was launched to standardize the training of apprentices. For more information visit, www.ihsinfo.org/trainermanual

• **What should I study?**
You should be able to understand and apply all of the concepts in the competency model. This examination tests your ability to apply the theory taught in the textbooks to real-life patient scenarios. Every question on this examination is referenced to one of the books listed as “Recommended Reference Material” in the study guide.

• **Can I appeal my examination result?**
There is no appeal process through IHS for challenging individual examination questions, scoring or results.

• **Use of this guide does not assure you a passing score on the examination.**
• Which U.S. states are currently using the IHS written licensing assessment?

1. Alabama
2. Arizona
3. Arkansas
4. Colorado
5. Connecticut
6. Delaware
7. Florida
8. Georgia
9. Hawaii
10. Idaho
11. Illinois
12. Indiana
13. Iowa
14. Kentucky
15. Louisiana
16. Maine
17. Maryland
18. Massachusetts
19. Minnesota
20. Mississippi
21. Missouri
22. Montana
23. Nebraska
24. Nevada
25. New Hampshire
26. New Jersey
27. New Mexico
28. North Dakota
29. Ohio
30. Oregon
31. Rhode Island
32. South Carolina
33. South Dakota
34. Tennessee
35. Texas
36. Utah
37. Virginia
38. Washington
39. Wyoming

• Which Canadian provinces are currently using the IHS written licensing assessment?

1. British Columbia
2. Manitoba
3. Nova Scotia
4. Ontario

For Technical Assistance with Webassessor™ or the Testing Centers Network, contact:

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