Study Guide

International Licensing Examination for Hearing Healthcare Professionals

Prepared by:

International Hearing Society

Revised 09/13/2016

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.

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. It is up to your local licensing board to determine whether you pass or fail the examination, and not the International Hearing Society. 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

International Hearing Society
16880 Middlebelt Road, Suite 4 Livonia, MI 48154
Phone 734.522.7200 Fax 734.522.0200 www.ihsinfo.org

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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.

International Hearing Society
16880 Middlebelt Road, Suite 4
Livonia, MI 48154
Phone 734.522.7200
Fax 734.522.0200
www.ihsinfo.org

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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 competency model of the International Hearing Society.

[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
- To determine an answer, you must be able 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.

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 (IHS). 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*![2] It is a self-paced, independent, self-study course. It is specifically designed as an introduction to the

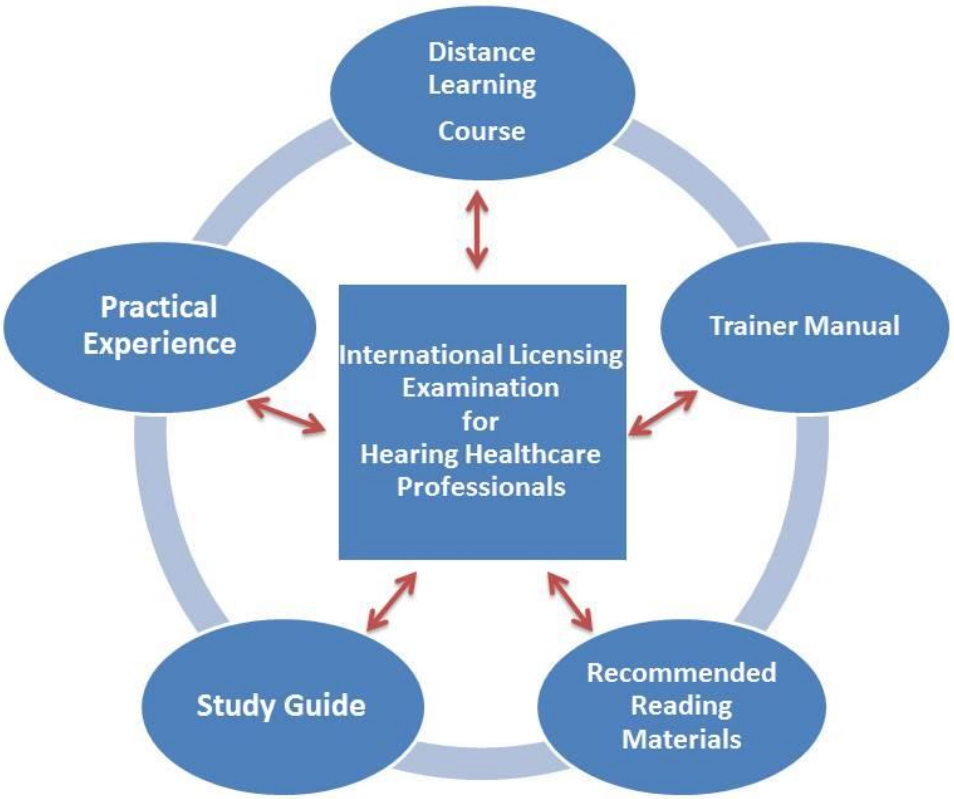
[2] Please note: Use of this guide and/or the IHS *Distance Learning for Professionals in Hearing Health Sciences* course does not assure you a passing score on the Examination.

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, 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.**

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.



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 10 competency areas. Please refer to the Competency Model included in this study guide.

Taking 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.

Special Accommodations

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

IHS will conduct an individualized assessment of each request for special accommodations based upon the documentation submitted by the candidate in accordance with the Accommodation Request Form requirements. The special accommodations assessment period is typically sixty (60) days.[3] IHS will then notify the candidate and the licensing body whether the special accommodation request has been approved or denied.

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.

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).

[3] Please note that the submission of incomplete Accommodation Request Forms and/or incomplete supporting documentation may delay the assessment process.

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 or out of five (5) options available. A few questions may request you to select three (3) answers out of five (5) options. In some cases there are only (3) answer options.

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

Candidates will not receive examination results from the International Hearing Society. The licensing board will distribute the results of the examination to the candidate.

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 (IHS) 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.

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 board, not the International Hearing Society. 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 with candidates.

Results

The licensing board will contact the candidate with the examination results. All inquiries regarding the status or results of the examination should be directed to the state/provincial licensing board.

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 boards for details.

Score Reporting

- ***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 can 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.

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.*

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.

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.

Recommended:

- ***IHS' Distance Learning for Professionals in Hearing Health Sciences course***
  MI: International Hearing Society (2016) www.ihsinfo.org/dlcourse
  - *Professional Training Workbook in Hearing Health Sciences* (ISBN 978-0-7380-6638-7)
  - *Professional Training Textbook in Hearing Health Sciences* (ISBN 978-0-7380-6637-0)
  - Online Learning System: Lesson tests and the final exam is only available with the purchase of the course.

- ***Trainer Manual*** *(2nd ed.)* MI: International Hearing Society (2016) www.ihsinfo.org/trainermanual (ISBN 978-0-7380-6636-3)

- ***Fitting and Dispensing Hearing Aids*** Taylor, Brian and Mueller, H. Gustav, CA: Plural Publishing Inc. (2011) Purchase online at www.pluralpublishing.com

- ***Introduction to Audiology*** *(11th edition or later)* Martin, Frederick and John Clark, NY: Allyn & Bacon (2011) Purchase online at www.pearsonhighered.com

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

Supplemental:

- ***Learning to Hear Again*** An Audiologic Rehabilitation Curriculum Guide *(2nd ed.)* Wayner, D.S. and Abrahamson, J.E. NY: Hear Again (2000)

- ***Sandlin's Textbook of Hearing Aid Amplification: Technical and Clinical Considerations*** (3rd ed.), Metz, Michael J. (2014)

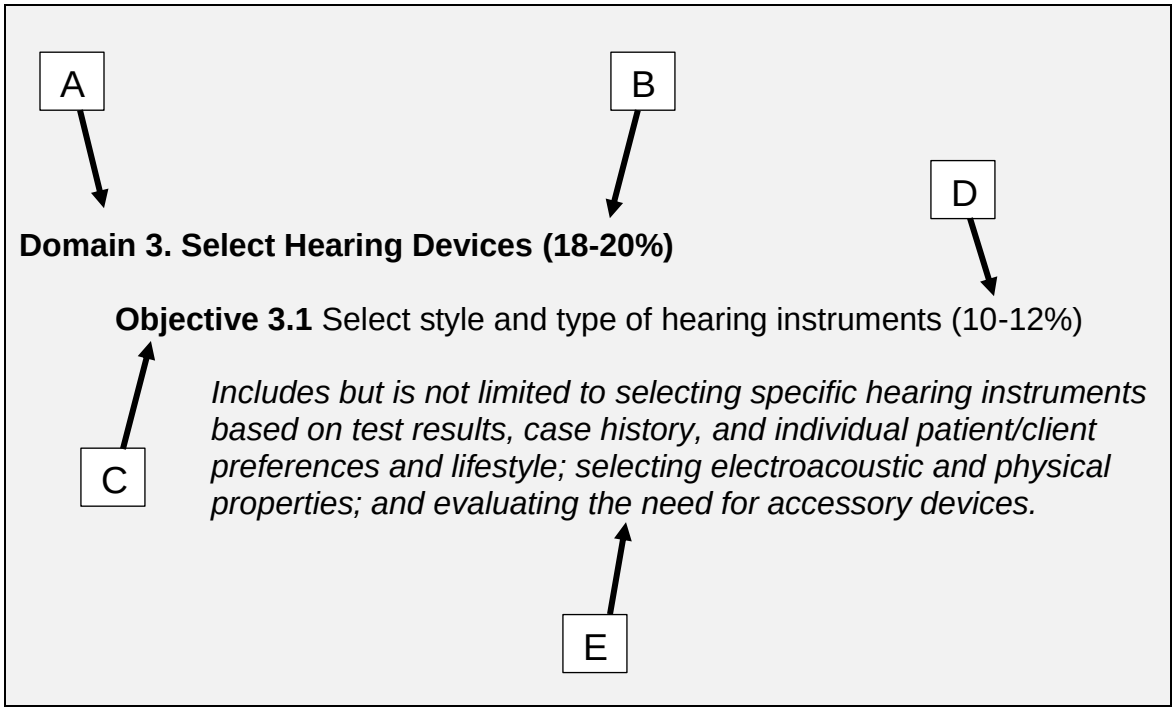
- **World Health Organization** www.who.int

Note: Only IHS textbooks are available for purchase at www.ihsinfo.org

Competency Model

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 aid specialist.

STRUCTURE AND TERMINOLOGY



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.

###

Acronym/Abbreviation List

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

AC - Air Conduction

A/D - Analog-to-digital

ALD - Assistive Listening Device

ANSI - American National Standards Institute

APHAB - Abbreviated Profile of Hearing Aid Benefit

BC - Bone Conduction

BAHA - Bone-Anchored Hearing Aid

BiCROS - Bilateral Contralateral Routing of Signal

BTE - Behind-the-Ear

CIC - Completely-In-the-Canal

COSI - Client Oriented Scale of Improvement

CROS - Contralateral Routing of Signal

D/A - Digital-to-Analog

dB- Decibel

dB HL - Decibels Hearing Level

dB SPL - Decibels Sound Pressure Level

DSL I/O - Desired Sensation Level Input/Output

DSP - Digital Signal Processing

ENT - Ear-Nose-Throat

FM - Frequency Modulation

FOG - Full-on-Gain

HF - High Frequency

NAL-NL - National Acoustic Laboratories - Non-Linear

NAL-NL1 (see above)

NAL-NL2 (see above)

NAL-R - National Acoustic Laboratories-Revised

NOAH - software interface

NU-6 - Northwestern University Word List -6

OAE - Otoacoustic Emissions

OSPL90 - Output Sound Pressure Level with 90dB input

PB Max - Patient Maximum Performance with Phonetically Balanced Word List

POGO - Prescription of Gain and Output

PSAP - Personal Sound Amplification Product

PTA - Pure Tone Average

REAR - Real Ear Aided Response

RECD - Real Ear to Coupler Difference

REIG - Real Ear Insertion Gain

REIR - Real Ear Insertion Response

REM - Real Ear Measurements

REOG - Real Ear Occluded Gain

REOR - Real Ear Occluded Response

RESR - Real Ear Saturation Response

REUR - Real Ear Unaided Response

RIC - Receiver-in-Canal

HFA - High Frequency Average

HL - Hearing Level

HTL - Hearing Threshold Level

Hz - Hertz

IHAFF - Independent Hearing Aid Fitting Forum

IIE - Invisible in Canal

ITC - In-the-Canal

ITE In-the-Ear

LDL - Loudness Discomfort Level

mA - Milliampere

mAH - Milliampere Hours

MCL - Most Comfortable Loudness Level

MPO - Maximum Power Output

NAL - National Acoustic Laboratories (Australia)

NAL-L - National Acoustic Laboratories-Linear

SAT - Speech Awareness Threshold

SAV - Select-a-vent

SIN - Speech in Noise

SL - Sensation Level

SPL - Sound Pressure Level

SRT - Speech Reception Threshold

TM - Tympanic Membrane

UCL - Uncomfortable Loudness Level

VC - Volume Control

WRS - Word Recognition Score

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:

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.

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

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.

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: ispropryl alcohol
   D: disinfectant towelette

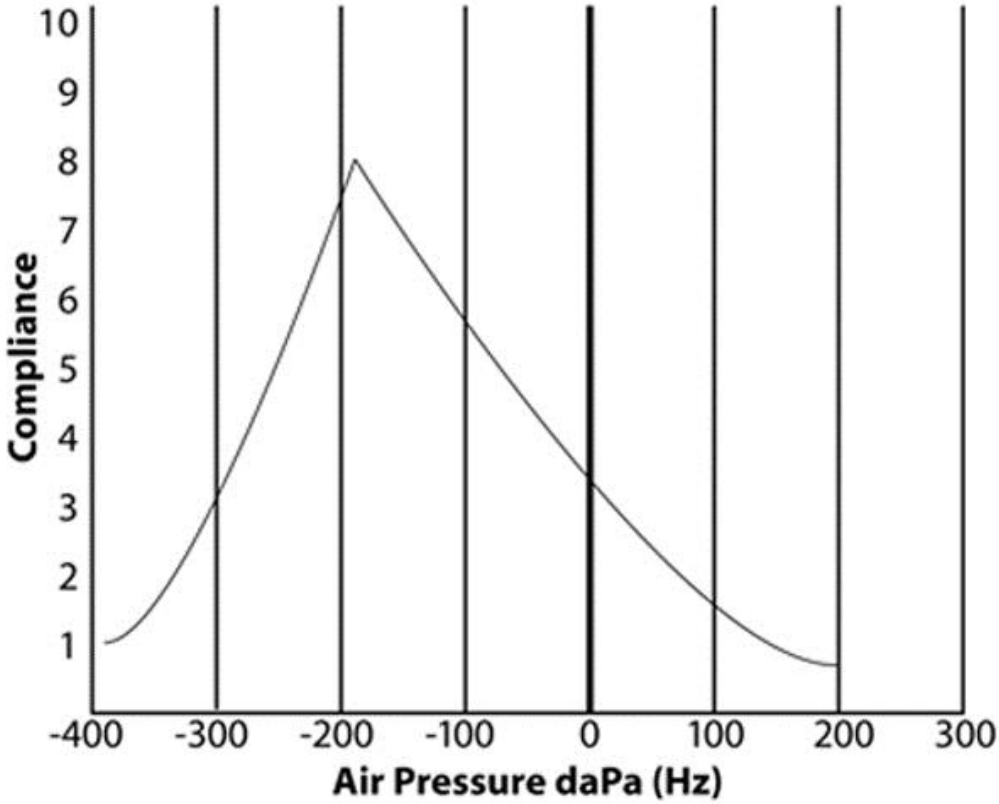
3. How does an osteoma present?

   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. 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

5. Refer to the exhibit.



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

A: A
B: A_d
C: B
D: C

6. 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

7. 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
8. 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

9. 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

10. 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

11. 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

12. 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

13. 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

14. 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

15. 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

16. 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

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

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

18. 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

19. 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

20. 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

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"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.1: Apply infection control protocols
   Reference: Infection Control in the Audiology Clinic (2nd ed.)

2. Correct Answer: "D"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.1: Apply infection control protocols
   Reference: Infection Control in the Audiology Clinic (2nd ed.)

3. Correct Answer: "B"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.2: Apply otoscopic inspection protocols
   Reference: Professional Training Textbook in Hearing Health Sciences, Chapter 9

4. Correct Answer: "B"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.3: Utilize audiometric testing protocols
   Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 20 and Professional Training Textbook in Hearing Health Sciences, Chapter 7

5. Correct Answer: "D"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.3: Utilize audiometric testing protocols
   Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 23 and Professional Training Textbook in Hearing Health Sciences, Chapter 8

6. Correct Answer: "B"
   Domain 2: Interpret and Apply Assessment Results
   Objective 2.1: Interpret and explain audiometric results
   Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 9

7. Correct Answer: "D"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.2: Apply otoscopic inspection protocols
   Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 6 and Professional Training Textbook in Hearing Health Sciences, Chapter 4, Part 1

8. Correct Answer: "C"
   Domain 1: Conduct Patient/Client Assessment
   Objective 1.2: Apply otoscopic inspection protocols
   Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 6 and Professional Training Textbook in Hearing Health Sciences, Chapter 4, Part 1

9. Correct Answer: "C"
Domain 3: Select Hearing Devices
Objective 3.1: Select style and type of hearing instruments
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 28 and Professional Training Textbook in Hearing Health Sciences, Chapter 10

10. Correct Answer: "B"
Domain 3: Select Hearing Devices
Objective 3.1: Select style and type of hearing instruments
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 27 and Professional Training Textbook in Hearing Health Sciences, Chapter 10

11. Correct Answer: "A" and "C"
Domain 3: Select Hearing Devices
Objective 3.2: Select earmold or other acoustic coupler
Reference: Professional Training Textbook in Hearing Health Sciences, Chapter 12

12. Correct Answer: "B"
Domain 3: Select Hearing Devices
Objective 3.2: Select earmold or other acoustic coupler
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 32

13. Correct Answer: "D"
Domain 3: Select Hearing Devices
Objective 3.2: Select earmold or other acoustic coupler
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 32 and Professional Training Textbook in Hearing Health Sciences, Chapter 11

14. Correct Answer: "B"
Domain 3: Select Hearing Devices
Objective 3.2: Select earmold or other acoustic coupler
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 32 and Professional Training Textbook in Hearing Health Sciences, Chapter 11

15. Correct Answer: "C"
Domain 5: Provide Continuing Care
Objective 5.3: Interpret electroacoustic analysis results
Reference: Professional Training Textbook in Hearing Health Sciences, Chapter 15

16. Correct Answer: "C"
Domain 4: Fit and Dispense Hearing Devices
Objective 4.3: Validate fitting
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 37 and Professional Training Textbook in Hearing Health Sciences, Chapter 13

17. Correct Answer: "C"
Domain 4: Fit and Dispense Hearing Devices
Objective 4.3: Validate fitting
Reference: Fitting and Dispensing Hearing Aids and *Professional Training Workbook in Hearing Health Sciences, Lesson 37*

18. Correct Answer: "A"
Domain 5: Provide Continuing Care
Objective 5.1: Implement aural rehabilitation and counseling
Reference: Introduction to Audiology (11th ed.) and Professional Training Workbook in Hearing Health Sciences, Lesson 38

19. Correct Answer: "C"
Domain 3: Select Hearing Devices
Objective 3.1: Select style and type of hearing instruments
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 39 and Professional Training Textbook in Hearing Health Sciences, Chapter 14

20. Correct Answer: "D"
Domain 5: Provide Continuing Care
Objective 5.2: Apply instrument maintenance and troubleshooting protocols
Reference: Professional Training Workbook in Hearing Health Sciences, Lesson 40

End of Answer Key

Frequently Asked Questions (FAQs)

- **How many questions are on the test?**
  The examination is comprised of one hundred five (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.

- **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. Kansas (in late 2016)
  15. Kentucky
  16. Louisiana
  17. Maine
  18. Maryland
  19. Massachusetts
  20. Minnesota
  21. Mississippi
  22. Missouri
  23. Montana
  24. Nebraska
  25. Nevada
  26. New Hampshire
  27. New Jersey
  28. New Mexico
  29. North Dakota
  30. Ohio
  31. Oregon
  32. Rhode Island
  33. South Carolina
  34. South Dakota
  35. Tennessee
  36. Texas
  37. Utah
  38. Virginia
  39. Washington
  40. West Virginia
  41. Wyoming

- **Which Canadian provinces are currently using the IHS written licensing assessment?**
  1. British Columbia
  2. Manitoba
  3. Nova Scotia
  4. Ontario

International Hearing Society
16880 Middlebelt Road, Suite 4
Livonia, MI 48154
Phone 734.522.7200
Fax 734.522.0200
www.ihsinfo.org