#### FORMATIVE ASSESSMENT OF CLINICAL SKILLS (FACS)

**Portion 1: Basic Diagnostics** 

A. Demonstration of Skills

Students must perform all of the following skills.

Name:\_\_\_\_\_

|               | Clinical Skill   | Pass | Fail | Comments | Initials/ |
|---------------|--|------|------|----------|-----------|
| 1 Ot          | NCONV  |      |      |          | Date      |
| 1.00          | Use the hand held otoscope to demonstrate appropriate      |      |      |          |           |
| а.            | bracing straightening of ear canal and insertion denth     |      |      |          |           |
| h             | Freeze the screen using the video otoscope and identify to |      |      |          |           |
| υ.            | the supervisor the major landmarks on the TM and the       |      |      |          |           |
|               | presence of any foreign object cerumen or pathology        |      |      |          |           |
| 2 Air         | Conduction Testing   |      |      |          |           |
| 2. An<br>9    | Instruct patient on test procedures                        |      |      |          |           |
| h             | Prenare patient for testing (assume daily biologic         |      |      |          |           |
| υ.            | calibration for pure-tone testing has been conducted)      |      |      |          |           |
| C             | Prenare audiometer for testing                             |      |      |          |           |
| d             | Perform air conduction testing                             |      |      |          |           |
| u.            |  |      |      |          |           |
| e.            | Record test results on audiogram                           |      |      |          |           |
| <b>3. BO</b>  | the Conduction Testing                                     |      |      |          |           |
| a.            | Instruct patient on test procedures                        |      |      |          |           |
| b.            | Prepare patient for testing (assume daily biologic         |      |      |          |           |
|               | calibration for pure-tone testing has been conducted)      |      |      |          |           |
| c.            | Prepare audiometer for testing                             |      |      |          |           |
| d.            | Perform bone conduction testing                            |      |      |          |           |
| e.            | Record test results on audiogram                           |      |      |          |           |
| <b>4. Int</b> | erpretation of Audiogram                                   |      |      |          |           |
| a.            | Classify type, degree, and configuration of hearing loss   |      |      |          |           |
| b.            | Calculate PTA  |      |      |          |           |
| 5. Spe        | eech Recognition Threshold (SRT)                           |      |      |          |           |
| a.            | Instruct patient on test procedures                        |      |      |          |           |
| b.            | Prepare equipment for testing                              |      |      |          |           |
| c.            | Familiarize patient with spondee words                     |      |      |          |           |
| d.            | Obtain SRT with proper procedure using MLV                 |      |      |          |           |
| e.            | Obtain SRT with proper procedure using recorded speech     |      |      |          |           |
| f.            | Calculate SRT/PTA agreement                                |      |      |          |           |
| 6. Wo         | ord Recognition Score (WRS)                                |      |      |          |           |
| a.            | Instruct patient on test procedures                        |      |      |          |           |
| b.            | Prepare equipment for testing                              |      |      |          |           |
| c.            | Present word list with carrier phrase at appropriate       |      |      |          |           |
|               | presentation level using MLV                               |      |      |          |           |
| d.            | Present word list at appropriate presentation level using  |      |      |          |           |
|               | recorded speech  |      |      |          |           |
| e.            | Calculate WRS and classify results                         |      |      |          |           |
| <b>7. He</b>  | aring Aid Evaluation                                       |      |      |          |           |
| a.            | Make two earmold impressions (otoscopic exam, select       |      |      |          |           |
|               | and place proper otoblock, no gaps or cracks in            |      |      |          |           |
|               | impression, mark impression for D-mic placement).          |      |      |          |           |

### FACS Portion 1 B. Oral Questions

|     | Clinical Question  | Pass | Fail | Comments | Initials/<br>Date |
|-----|--|------|------|----------|-------------------|
| 1.  | What precautions were taken to ensure you weren't giving<br>the patient any subtle clues during testing that could affect<br>the validity of your results? |      |      |          |                   |
| 2.  | What type of transducer did you use for air conduction testing and why?  |      |      |          |                   |
| 3.  | In what situations would you use hand-raising vs. pushing a button?  |      |      |          |                   |
| 4.  | When conducting pure-tone testing, which ear should you test first and why?  |      |      |          |                   |
| 5.  | What method of threshold determination did you use for pure-tone testing?  |      |      |          |                   |
| 6.  | What conditions would indicate the need to obtain an air conduction threshold at 3000 Hz?  |      |      |          |                   |
| 7.  | Where did you place the bone oscillator for bone conduction testing and why?   |      |      |          |                   |
| 8.  | What are the advantages of using recorded speech vs. MLV?<br>What are the advantages of using MLV vs. recorded speech?                                     |      |      |          |                   |
| 9.  | What are some reasons that your SRT/PTA agreement may be poorer than expected?   |      |      |          |                   |
| 10. | What was the length of the word list you used to obtain your WRS and why?  |      |      |          |                   |
| 11. | Which word list would you use to obtain a WRS on a 5 year-<br>old? Under what conditions would you use an open-set vs. a<br>closed-set for this child?     |      |      |          |                   |
| 12. | Under what conditions would you obtain a second WRS in<br>the same ear at a different intensity level?   |      |      |          |                   |

### FORMATIVE ASSESSMENT OF CLINICAL SKILLS (FACS) Portion 2: Masking & Immittance

A. Demonstration of Skills

Students must perform all of the following skills. Nam

s. Name:\_\_\_\_\_

|               | Clinical Skill  | Pass | Fail | Comments | Initials/<br>Date |
|---------------|---|------|------|----------|-------------------|
| 1. Mas        | sking   |      |      |          |                   |
| a.            | Insert foam earplug into subject's right ear  |      |      |          |                   |
| b.            | Use supra-aural earphones to obtain air and bone<br>conduction pure tone thresholds from 250-8000 Hz<br>using standard procedure. Test inter-octave<br>frequencies if appropriate.  |      |      |          |                   |
| с.            | Use appropriate masking procedures for pure-tone<br>testing where applicable, including stimulus type,<br>starting and ending intensity, and protocol. Indicate<br>appropriate masked symbols and masking levels on<br>the audiogram. |      |      |          |                   |
| d.            | Conduct SRT and WRS testing using standard<br>procedures. Mask as needed. Record all required<br>masking information on the audiogram.  |      |      |          |                   |
| <b>2. Tyn</b> | ipanometry  |      |      |          |                   |
| a.            | Conduct tympanometry testing using a diagnostic   |      |      |          |                   |
|               | admittance meter.   |      |      |          |                   |
| b.            | Identify ear canal volume, static acoustic<br>admittance, peak pressure, and gradient or<br>tympanogram width.  |      |      |          |                   |
| c.            | Indicate if the tympanogram is normal and explain   |      |      |          |                   |
|               | why or why not.   |      |      |          |                   |
| 3. Aco        | ustic Reflex Thresholds   |      |      |          |                   |
| a.            | Use the admittance meter to conduct acoustic reflex<br>threshold testing at 500, 1000, and 2000 Hz<br>(ipsilateral and contralateral) following standard<br>procedure and appropriate safety protocols.                               |      |      |          |                   |
| b.            | Identify the acoustic reflex threshold based on the test results.   |      |      |          |                   |
| с.            | Record ART results on the audiogram.  |      |      |          |                   |
| d.            | Identify if the ART results are normal and explain why or why not.  |      |      |          |                   |
| 4. Hea        | ring Aid Evaluation   |      |      |          |                   |
| а.            | Make two earmold impressions (otoscopic exam,<br>select and place proper otoblock, no gaps or cracks<br>in impression, mark impression for D-mic<br>placement).   |      |      |          |                   |

#### FACS Portion 2 B. Oral Questions

## Students should be prepared to answer all of the following questions. The supervisor will choose a portion of these questions to ask during the assessment.

| Clinical Question  | Pass | Fail | Comments | Initials/<br>Date |
|--|------|------|----------|-------------------|
| 1. Describe the phenomenon of the "masking dilemma" and how this issue can be addressed clinically.  |      |      |          |                   |
| 2. What is a vibro-tactile response? At what frequencies is this most likely to be seen?   |      |      |          |                   |
| <b>3.</b> What type of stimulus is used for masking during SRT and WRS testing and why?  |      |      |          |                   |
| 4. A flat tympanogram can be associated with very low, normal, or very high ear canal volume. Describe why this occurs and give an example of one reason for each of these test results. |      |      |          |                   |
| 5. How is gradient different from tympanogram width?<br>What is the most likely cause of an unusually large<br>tympanogram width or gradient?  |      |      |          |                   |
| 6. What important safety concern must audiologists be aware of regarding ART and ARD testing?  |      |      |          |                   |
| 7. What is the MEMR?   |      |      |          |                   |
| <b>8.</b> List one source of normative data for ART testing.   |      |      |          |                   |
| <b>9.</b> What response would you expect to obtain during immittance testing for a patient with auditory neuropathy?   |      |      |          |                   |
| <b>10.</b> What is a likely cause of a Jerger type A <sub>D</sub> tympanogram? A Jerger type A <sub>S</sub> tympanogram?   |      |      |          |                   |
| <b>11.</b> Under what circumstances would you use multi-frequency multi-component tympanometry?  |      |      |          |                   |

#### FORMATIVE ASSESSMENT OF CLINICAL SKILLS (FACS) Portion 3: Amplification

A. Demonstration of Skills

#### Students must perform all of the following skills. Name:\_\_\_\_\_

|               | Clinical Skill  | Pass | Fail | Comments | Initials/<br>Date |
|---------------|---|------|------|----------|-------------------|
| 1. Heat       | ring Aid Repair   |      |      |          |                   |
| a.            | Identify HA (make, model, serial number, style, ear).       |      |      |          |                   |
| b.            | Identify the microphone(s).                                 |      |      |          |                   |
| c.            | Identify the receiver port.                                 |      |      |          |                   |
| d.            | Identify the vent.  |      |      |          |                   |
| e.            | Identify the battery size.                                  |      |      |          |                   |
| f.            | Identify any and all user controls (specify type/function). |      |      |          |                   |
| g.            | Perform visual inspection of HA (cracks, debris, broken     |      |      |          |                   |
|               | wires, user controls, battery contacts, etc.).              |      |      |          |                   |
| h.            | Perform listening check (Ling 6-Sound test, internal        |      |      |          |                   |
|               | feedback, distortion, directional mic and program check,    |      |      |          |                   |
|               | user VC).   |      |      |          |                   |
| i.            | Clean a given hearing aid using appropriate tools.          |      |      |          |                   |
| j.            | Given a hearing aid, replace battery door.                  |      |      |          |                   |
| k.            | Given a hearing aid, use grinder/buffer for shell/earmold   |      |      |          |                   |
|               | modification.   |      |      |          |                   |
| <b>l.</b>     | Replace earmold tubing.                                     |      |      |          |                   |
| m.            | Perform electroacoustic analysis on one linear and one      |      |      |          |                   |
|               | non-linear hearing aid and compare to manufacturer's        |      |      |          |                   |
|               | specs.  |      |      |          |                   |
| <b>2. Hea</b> | ring Aid Evaluation   |      |      |          |                   |
| a.            | Obtain frequency specific UCLs.                             |      |      |          |                   |
| b.            | Complete one speech-in-noise test (e.g. HINT, Quick-        |      |      |          |                   |
|               | SIN).   |      |      |          |                   |
| c.            | Establish patient communication peads with one              |      |      |          |                   |
| u.            | uslide tion survey tool (a.g. COSL ADHAD                    |      |      |          |                   |
|               | TELEGRAM)   |      |      |          |                   |
| e             | Make two earmold impressions (otoscopic exam select         |      |      |          |                   |
|               | and place proper otoblock no gaps or cracks in              |      |      |          |                   |
|               | impression mark impression for D-mic placement)             |      |      |          |                   |
| 3. Heat       | ring Aid Fitting  |      |      |          |                   |
| a.            | Enter patient information into computer database and        |      |      |          |                   |
|               | program HA for initial fitting on given patient.            |      |      |          |                   |
| b.            | Perform REMs at soft, moderate, loud, and MPO levels        | 1    |      |          |                   |
|               | for a standard BTE with a traditional earmold or a custom   |      |      |          |                   |
|               | product (ITE, ITC, or CIC).                                 |      |      |          |                   |
| c.            | Perform REMs at soft, moderate, loud, and MPO levels        |      |      |          |                   |
|               | for an "open fit" or RITE hearing aid.                      |      |      |          |                   |
| d.            | Instruct patient on insertion/removal of hearing aid(s).    |      |      |          |                   |
| e.            | Instruct patient on operation of controls, including        |      |      |          |                   |
|               | changing programs.  |      |      |          |                   |

| f. | Instruct patient on operation of hearing aid with telephone, demonstrating use with clinic phone.                             |  |  |
|----|---|--|--|
| g. | Orient patient regarding battery life expectations.   |  |  |
| h. | Instruct patient on cleaning and maintenance of hearing aids.   |  |  |
| i. | Instruct patient on use of common hearing aid supplies<br>(e.g. Dri-Aid, battery tester, Oto-Ease, earmold tubing<br>blower). |  |  |

### FACS Portion 3

#### B. Oral Questions

# Students should be prepared to answer all of the following questions. The supervisor will choose a portion of these questions to ask during the assessment.

|                             | Clinical Question   | Pass | Fail | Comments | Initials/<br>Date |
|-----------------------------|---|------|------|----------|-------------------|
| 1.                          | Explain the purpose of the Ling 6-Sound test.   |      |      |          |                   |
| 2.                          | Explain how the following might impact your HA feature recommendations for a patient:   |      |      |          |                   |
| a.<br>b.<br>c.<br>d.<br>e.  | Degree and configuration of hearing loss<br>Type of hearing loss<br>UCLs<br>Speech test results<br>Validation survey tool   |      |      |          |                   |
| 5.                          | programmable and a true "digital" programmable HA?  |      |      |          |                   |
| 4.                          | In what circumstance might a directional microphone system on a HA NOT be recommended for a patient?  |      |      |          |                   |
| 5.                          | What is RECD and when is it typically used?   |      |      |          |                   |
| 6.                          | What is a "trimpot" and how is it used/manipulated?   |      |      |          |                   |
| 7.                          | Explain how different types/thicknesses of tubing may affect earmold acoustics.   |      |      |          |                   |
| 8.                          | Explain how venting affects the performance of a HA.  |      |      |          |                   |
| 9.                          | Explain what type of EM materials you might choose<br>in the following cases: 1) Adult with skin allergies and<br>a moderately severe-profound mixed HL; 2) Child with<br>a mild-moderate SNHL; (3) Adult with collapsing<br>canals, excessive perspiration, and a mild-moderate<br>SNHL. |      |      |          |                   |
| 10.<br>a.<br>b.<br>c.<br>d. | In each of the following areas, identify at least one<br>assistive listening device and explain how it may help a<br>patient with problems (beyond a HA):<br>Alarms<br>Telephone<br>Television listening<br>Personal communication in noise   |      |      |          |                   |
| 11.                         | Explain the circumstances in which you might take an EM impression with various jaw positions.  |      |      |          |                   |

#### FORMATIVE ASSESSMENT OF CLINICAL SKILLS (FACS) Portion 4: Special Tests (ABR, APD, OAE)

A. Demonstration of Skills

#### Students must perform all of the following skills. Name: **Clinical Skill** Fail Comments Pass Initials/ Date 1. Neurodiagnostic Auditory Brainstem Response a. Instruct patient on test procedures. **b.** Prepare the patient for a two channel recording. Use an appropriate electrode montage and achieve good impedance (< 7 kOhms). **c.** Set up test parameters on equipment (intensity, repetition rate, stimulus type, stimulus polarity, temporal shaping of stimulus, analysis time window, filter settings, channel designation, gain, rejection rate, transducer, number of sweeps). **d.** Conduct ABR testing using one intensity, one polarity, and two repetition rates e. Identify waves I, III, and V and calculate absolute latencies, inter-peak latencies, interaural latency differences, and wave I-V amplitude ratios within ears and between ears, where appropriate **f.** Identify if the ABR results are normal and explain why or why not. 2. Auditory Processing Testing Your supervisor will ask you to select a test from one a. of the following categories: temporal processing, monaural low redundancy, and dichotic listening. Select a test for the given category and explain why you chose that test. **b.** Prepare audiometer and calibrate CD. c. Instruct the patient on the task at hand. **d.** Identify if the AP results are normal and explain why or why not. 3. Otoacoustic Emissions a. Instruct patient on test procedures. **b.** Prepare patient for testing, choosing an appropriate tip and placing the tip appropriately. **c.** Prepare equipment for testing. d. Perform adult diagnostic DPOAE and TEOAE testing. e. Identify if OAE results are normal and explain why or why not. 4. Hearing Aid Evaluation **a.** Make two earmold impressions (otoscopic exam, select and place proper otoblock, no gaps or cracks in impression, mark impression for D-mic placement).

#### FACS Portion 4 B. Oral Questions

## Students should be prepared to answer all of the following questions. The supervisor will choose a portion of these questions to ask during the assessment.

|     | Clinical Question  | Pass | Fail | <b>Comments/Initials</b> |
|-----|--|------|------|--------------------------|
| 1.  | What electrode montage did you use and why?  |      |      |                          |
| 2.  | What factors might contribute to excessive noise/artifact in ABR testing and how might you attempt to resolve these issues?  |      |      |                          |
| 3.  | If you conduct a neurodiagnostic ABR using an 80 dB nHL click stimulus and the morphology is poor, what would you do next?   |      |      |                          |
| 4.  | Under what conditions would you change the polarity of the stimulus during ABR testing?  |      |      |                          |
| 5.  | What is the advantage of recording both ipsilaterally and contralaterally during ABR testing?  |      |      |                          |
| 6.  | What are some things that you would want to know about<br>in an auditory processing case history that you typically do<br>not ask during a standard audiologic evaluation case<br>history? |      |      |                          |
| 7.  | What are some confounding variables that could make a true diagnosis of auditory processing difficult to conclude?   |      |      |                          |
| 8.  | What type of evaluation needs to be completed prior to proceeding with the APD test battery?   |      |      |                          |
| 9.  | Can OAES, in and of themselves, determine hearing sensitivity? Why or why not?   |      |      |                          |
| 10. | . Under what circumstances would you retest a DPOAE?   |      |      |                          |